



A  
C O M P E N D I U M  
O F  
P H Y S I C,  
A N D  
S U R G E R Y.





A

COMPENDIUM

OF



PHYSIC

AND

SURGICAL

OF

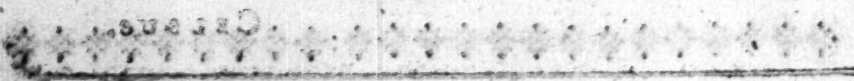
THE USE OF

YOUNG PRACTITIONERS

SURGICAL

Medicines and Instruments, &c. &c.

Curry



LONDON

Printed for J. Noakes, Bookseller to His

Majesty, MDCCLXXIX.

J. H. C.

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C O M P E N D I U M  
OF  
P H Y S I C,  
AND  
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FOR THE USE OF  
YOUNG PRACTITIONERS,

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*Morbos autem non Eloquentia, sed remediis  
Curari,*

*MSB*

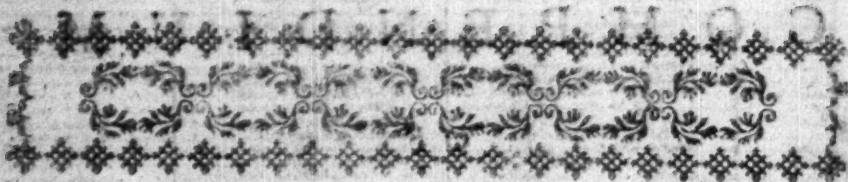
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L O N D O N :

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MAJESTY, MDCCLXIX.

10



P H I L O S O P H I C A L

P R E F A C E

With the following collection, intended for the use of the young practitioners of the most simple and judicious for the treatment of the human body; in the execution of which we have collected from the most eminent writers, both ancient and modern, and from the most approved practice, whatever appeared comparable with our design.

In order to characterize the diseases, we have endeavoured to give the most striking descriptions, that they may be distinguished from each other; a point of the utmost consequence to the medicinal director; without whose attention to which





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In order to characterise diseases, we have endeavoured to give the most striking descriptions, that they may be distinguished from each other ; a point of the utmost consequence to the medicinal director ; without a due attention to

which, much mischief may be done; especially by those, who treat diseases merely by their names, without regard to their symptoms, and effects.

If the student in physic, and surgery, for whose use this book is designed, should receive any advantage from using it, as a kind of *vade mecum*, 'till practice has confirmed his judgement, the author's intention will be fulfilled: and though he is apprised, that compendiums are not perfect instructors, he is convinced also, that dry systematic writers, are often as disgusting, as they are voluminous, and deter the young student by their prolixity.

This we must confess, was partly our own case; to remedy which, and the necessity of a frequent recurrence to authors, we threw them together in this form; so that a compendious view of useful matter, might constantly lye before us.

The Author did not think it necessary to prefix his name to this little work; being well convinced, that its reception from the public, will depend upon other circumstances; and

# P R E F A C E.

vii

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# CONTENTS.

## *Compendium of Physic.*

CHAP. I. Of Recent Colds - -	Page 1
II. Of Recent Coughs from taking Cold	8
III. Of Fevers in general - - - - -	11
IV. Of the Inflammatory, or burning Fever - - - - -	20
*** Of Putrid Malignant Fevers - - -	28
V. Of intermitting Fevers, and Agues -	34
VI. Of the Miliary Fever - - - - -	43
VII. Of the Hectic Fever, or Consumption	46
VIII. Of the Rheumatic Fever, and different kinds of Rheumatism - - - - -	53
IX. Of the slow Nervous Fever - - - -	63
X. Of the Scarlet Fever - - - - -	67
XI. The Method of treating Fevers by the Antients, and some Moderns, so far as it relates to cool Air, and cold Water -	68
XII. The Measles - - - - -	80
XIII. The Small Pox - - - - -	83
*** Malignant Small Pox - - - - -	89
*** The new Method of Inoculation for the Small Pox - - - - -	91
XIV. The new Method of treating the Small Pox - - - - -	97
XV. Observations on Inoculation, and the Treatment of the Small Pox - -	105
XVI. Of the Apoplexy - - - - -	115
b XVII. Of	

CHAP. XVII. Of Paralysis, or Palsy -	Page 119
* * * * * The Vertigo, or Giddiness -	121
XVIII. Of the Epilepsy, or falling Sickness	123
XIX. Chorea Sancti Viti; or St. Vitus's Dance	
- - - - -	128
XX. The Phrenitis, or Phrensy - - - -	129
XXII. The Cephalagia, or Head Ach - -	133
XXIII. Of Catalepsy, Tetanus, Opisthotonus,	
and Emprosthnus - - - - -	153
XXIV. Of Nervous complaints in general	141
XXV. The inflamed sore Throat, and Quinsey	
- - - - -	143
XXVI. The Putrid, Malignant sore Throat	147
XXVII. The Ophthalmia, or inflamed Eye -	152
XXVIII. The Peripneumonia, or inflammation	
of the Lungs - - - - -	158
XXIX. The Pleurisy - - - - -	165
XXX. Of the Cardialgia, Heart Burn, loss of	
Appetite, Indigestion, &c. - - -	170
XXXI. Of the Hiccough, or Hiccup - -	177
XXXII. Diarrhæa, or looseness - - - -	178
XXXIII. The use of Castor Oil, in Disorders of	
the Bowels, and Kidnies - - - -	184
XXXIV. Dysentery, or Bloody Flux - -	187
XXXV. Colics in general - - - - -	195
XXXVI. The Flatulent, or Spasmodic Colic	198
XXXVII. Colics from Indigestion, and Irrita-	
tion - - - - -	200
XXXVIII. The Inflammatory Colic; or In-	
flammation of the Bowels - - -	202
XXXIX. The Bilious Colic - - - - -	204
XL. The Iliac Passion - - - - -	206
XLI. The Nervous Colic, or dry Belly Ach	210
XLII. The	



# CONTENTS.

xi

CHAP. XLII.	The Cholera Morbus, or Bilious vomiting, and purging - - -	Page 213
XLIII.	The Nephritis, and Stone Colic - - -	215
XLIV.	Suppressions of Urine - - -	220
XLV.	Of Diabetes, or profusion of Urine - - -	226
XLVI.	The Jaundice - - -	228
XLVII.	The Dropsy - - -	234
XLVIII.	The Scrofula, or Kings Evil - - -	241
XLIX.	Cancer - - -	247
L.	The Hydrophobia, or Bite of a mad Dog - - -	249
LI.	Suppression of Menfes, and Chlorosis - - -	253
LII.	Uterine Hæmorrhages, and Menstrual Cessation - - -	257
LIII.	Flour Albus, or Whites - - -	263
LIV.	Of Disorders attending Pregnancy - - -	266
LV.	Of Delivery, or Child Birth, and the consequent Symptoms - - -	270
LVI.	Of the Disorders consequent of Labour - - -	272
LVII.	General Directions in regard to Children - - -	282
LVIII.	Of the Meconium - - -	297
LIX.	Of Acidities, or sharp Humours in the Stomach, and Bowels - - -	299
LX.	Of Worms - - -	304
LXII.	Convulsions, and Fits - - -	309
LXIII.	The Thrush - - -	312
LXIV.	Of the Running behind the Ears of Children &c. - - -	314
LXV.	The Tinea, or Scald Head. - - -	316
LXVI.	The Convulsive, or Hooping Cough - - -	318
LXVI.	Of the Rickets - - -	323
LXVII.	Of Squinting. - - -	324
LXVIII.	Purging, or Watery Gripes - - -	326
LXIX.	The Chicken Pox - - -	330
LXX.	Peripneumony - - -	331
LXXI.	Of cutting the Teeth - - -	334
LXXII.	Hysteric, and other Fits - - -	338
LXXIII.	Of Poisons - - -	345
LXXIV.	Diseases of the Ear - - -	348
	LXXV. The	

CHAP. LXXV. The Lockt Jaw - - - -	Page 351
LXXVI. Diseases of the Teeth, or Gums - -	353
LXXVII. Observations on Hemlock - - - -	357
LXXVIII. To prevent the bad Effects of severe Frost and Snow - - - - -	360
LXXIX. The Scurvy - - - - -	362
LXXX. The Elephantiasis, or Leprosy - - -	366
LXXXI. The Piora, or Itch - - - - -	369
LXXXII. Of the Gout in the Head, Lungs, and	
LXXXIII. The Tympany - - - - -	373
LXXXIV. Of Blood Letting - - - - -	375
LXXXV. On Diet - - - - -	378

## COMPENDIUM of SURGERY.

CHAP. I. Of Surgery in general - - - -	387
II. Inflammation, and Phlegmon - - - -	393
III. Erysipelas, or St. Anthony's Fire - - -	401
IV. Œdema - - - - -	403
V. Schirrus - - - - -	404
VI. Gangrene, or Mortification - - - - -	405
VII. Wounds in general - - - - -	408
VIII. Wounds of the Blood Vessels - - - -	415
IX. Ulcers - - - - -	424
X. Burns, and Scalds - - - - -	428
XI. Shingles, Herpes, and Cutaneous Eruptions	430
XII. Fractures of the Limbs in general - - -	432
XIII. Dislocations - - - - -	440
XIV. Sprains, and Contusions - - - - -	445
XV. Hernias, or Ruptures - - - - -	448
XVI. Hæmorrhoids, or Piles - - - - -	451
XVII. Abscesses of the Anus and Nates, &c. -	453
XVIII. Obstructions in the Œsophagus, and Wind- pipe - - - - -	453
XIX. Stiff joints, and contracted Tendons - -	458
XX. The Mumps - - - - -	467
XXI. Gonorrhæa, and Venereal Diseases - -	468
XXII. Embalming Dead Bodies - - - - -	473
Pharmacopœia Medico Chirurgico - - - -	476





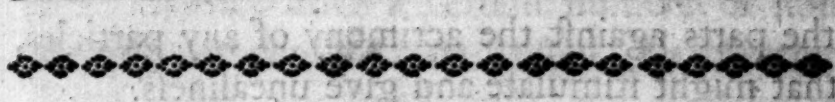
OF RECENT COLDS.

A

COMPENDIUM

OF

PHYSIC & SURGERY.



CHAP. I.

*Of Recent Colds.*

THE surface of the human body, or  
T skin, is naturally in a perpetual state  
of perspiration, exhaling an insensible  
steam from every pore ; the viscera, or bowels  
within, are also in the same state. All colds  
therefore, and most fevers take their origin  
from this warm perspirable matter being check'd  
or obstructed ; and when retained on the va-  
rious parts of the body, it produces different  
species of this disorder. It is this very matter  
also that forms the tough substance that ap-  
B  
pears



pears on the surface of the blood, on bleeding in neglected colds and fevers, and is generally known by the name of *Size*.

It may not be improper to observe to the young student, that there is a membrane of a very large extent, called the *Pituitary*, or a *Schneider's*, from the name of the Discoverer; which lines the nostrils, and various cavities in the cheeks and forehead, the palate, fauces, gullet, windpipe, and lungs: These parts are known to constantly ouze out a mucous fluid, to defend the parts against the acrimony of any particles, that might stimulate and give uneasiness.

From a diseased affection of this membrane, arising from the impression of cold air, obstructions, fullness, and distension of the vessels ensue; the head and nostrils appear stuffed, and loaded; or a hoarseness, cough, or sore throat are produced: In short, the cold is frequently local, according to the parts first affected by the inflicted stroke; and there seems to be no other difference between a partial, and general fever, than that in the one, a particular organ is more immediately affected; in the other, the disease is general throughout the habit.

To exemplify our meaning, let us suppose with an ingenious writer, a person just risen  
from

from a warm bed, or come out of a close warm room, or crowded assembly, into the open air, with his body heated, both within, and without: If by an additional cloathing, he has not guarded sufficiently against the impression of cold air, a sudden chill of the body will ensue from checked perspiration; which if not soon restored, will produce a general cold, and fever. If this precaution has been taken, and he has neglected to guard by muff, or handkerchief, against breathing a cold damp air through his nostrils and mouth; after a certain number of hours he will perceive his nose stuffed, his breathing interrupted; his smell, taste, and appetite impaired; he will complain of pain, and heaviness in his forehead; or, as already observed, he will perceive different symptoms, according to the parts affected by the chilling stroke.

But to be a little more particular, that species of cold, which goes by the name of a *blight*, happens when a cold stream of air is received on part of the teguments about the eyes, and which checking perspiration, occasions an inflation of the eye-lid, which gives it the appearance of a blown up bladder. This disorder generally submits to bathing the part with warm milk; fomenting with the same; or receiving the above in vapour; but, if neglected, it sometimes degenerates into St. *Anthony's* fire; for the treat-

ment of which, See CHAPTER on that disorder. When the cold stream of air falls on the lower part of the face, *swelled chops* will ensue, or what is called the *mumps*. The integuments will be inflated from ear to ear, the lips, and nostrils be remarkably swelled and hard, as will sometimes the parotid glands and kernels of the neck. The parts should be wrapt up in fresh wool or flannel, and kept constantly warm: and, if very painfull, a bread and milk pultice should be applied: if the patient is attended with a fever, he should lose some blood, be kept in bed, and dilute plentifully with barley water, baum, and sage tea, or with small whey; to which a few grains of nitre, *viz.* ten, fifteen, or twenty may be added every four or six hours while the fever is intense; which generally goes off in three, four, or five days. On the subsiding of the swelling, a few doses of purging physic are necessary; *viz.* half an ounce of manna, and as much glauber salts; or the same dissolved in a cup of fenna tea and prunes.

When a stream of cold air falls on the neck, it chills and thickens the fat of the cellular membrane, and by contracting the membranes, and muscular fibres themselves, it stiffens the muscles of the neck, and gives great pain, on attempting to put them in motion. These are called *creeks in the neck*. This



This disorder is sometimes very obstinate, and in some constitutions deserves particular attention: In general, it submits in a few days to what is called *ironing* it; fomenting with milk, and water, and bathing with hot fallad oil, to which a fourth part of spirit of Sal Armoniac, or Hartshorn may be added; and keeping up the perspiration by the application of warm sheep's wool, or flannel. It requires, however, sometimes the application of a blister before it will submit, which discharges the perspirable matter lodged on the membranes, and muscles.

The ear is no less liable to receive mischief from those blighting strokes, which thicken the wax, and of course dulls the hearing: If they chill the blood in the vessels, they occasion a painfull tumour, and throbbing in the ear; which, if neglected, or ill managed by hot, acrid applications, will be apt to terminate in inflammation, and gathering of matter: If the pain is violent, blood should be taken away, and the ear should be fomented; or the steam of the above fomentation should be conveyed into it: Warm milk alone, or oil, may be dropt into it, and then, a bread and milk pultice applied over it, or a few drops of fallad oil, or those of almonds may be used warm; and when the pain

is very violent, a dram of mithridate wrapt up in a piece of musling, should be applied warm into the ear, or some drops of *Bates's Anodine Balfam* dropt on cotton, or wool.

We shall conclude this chapter by observing, that the *general* treatment of colds, should be by immediately endeavouring to restore the checked perspiration; and this cannot be so effectually done, as by going instantly into a warm bed, and drinking plentifully of warm diluting liquors; or rather sipping them down hot, in the manner of drinking coffee: small negus, or thin white-wine whey, with a proper quantity of lemon juice, are as proper as any for this purpose, to raise a moderate sweat, which should be continued for some hours; or rather till all uneasy sensations, or feverish symptoms are removed: During this period, a strict abstinence should be practised; and, when the patient gets up, he should dress himself in warm cloathing, and keep within doors, until twenty-four hours, or more, shall shew that no longer confinement be necessary.

Was this simple method put in practice at the beginning of colds, they would soon be removed; and fevers the usual consequence, be prevented. But care should be taken to guard against a too officious administration of *beat-*  
ing

*ing* liquors and *medicines*, which serve only to irritate and inflame, but which are too commonly made use of on such occasions. If a fever should actually invade, consult the subsequent chapters.

We shall finish this, by observing that those who are subject to frequent colds, and defluations, are often guilty of an error, by keeping themselves too hot; for the skin being thus constantly bathed, as it were in a gentle sweat, becomes relaxed, soft, and incapable of performing its proper functions: from the defect of which, the slightest cause produces a total obstruction of perspiration; and from hence, numberless evils ensue. The incessant warm air unbraces, and enervates the whole machine, but more particularly the lungs; where the humours finding less resistance, are continually derived, and accumulated.

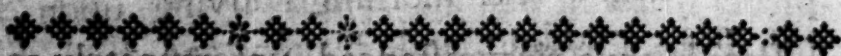
People thus circumstanced, unfortunately redouble their precautions against the cold, or even the coolness of the air; while their utmost cautions are but so many effectual means to lower their health; and, this the more certainly, as their dread of the free air necessarily subjects them to a sedentary life, which increases all their symptoms; while the hot drinks they indulge



## 8 *Of recent Coughs from taking Cold.*

in, compleats their misfortune. There is but one method of cure for such sufferers; that is, by accustoming them gradually to the air; to keep them out of hot chambers; to lessen their cloathing by degrees; to make them sleep cool; and to let them drink nothing but what is cold: to make them use much exercise; and finally, if the disorder be inveterate, to give them for some time, some preparation of the bark, and make them use the cold bath: this method will be equally successful with those, in whom the disease originally depended on a natural weakness of the stomach, or of the lungs.

Where cold bathing is not readily procured, or complied with, a sheet dipt in cold water, in which the patient is wrapt every morning may supply its place; and will be found of great use, in bracing up, and hardning the pores of the skin.



## 70 *C H A P. II.*

### *Of Recent Coughs from taking Cold.*

**T**HE coughs here intended to be treated of, and relieved, are those that arise in consequence of a checked perspiration, or taking cold; where the perspirable matter is thrown on

*Of recent Coughs from taking Cold.* 9

on the wind-pipe, and lungs ; and is as yet unattended with fever, or it is at least in a slight degree.

The first intention, is to set to rights the original cause, viz. the perspiration : This is to be effected by a warmer cloathing in the day, and not exposing the body to wet, or inclement weather ; living on small broths, and supping a pint or more of hot whey on going to bed, with, or without a spoonful of Mindererus Spirit : or twenty, or thirty drops of antimonial wine.

Dr. CHENEY says, what we commonly call *catching cold*, may be cured by lying much in bed ; by drinking plentifully of warm sack whey, with a few drops of spirit of *Hartshorn*, posset drink, water gruel, or any other small liquor ; a scruple of Contrayerva Powder may be taken night and morning ; living upon spoon meat, pudding, and chicken, and drinking every thing warm. In a word, treat it at first as a small fever, with gentle perspiratives ; and afterwards, if any cough, or spitting should remain, by softening the breast with a little sugar-candy, and oil of sweet almonds, or a solution of gum ammoniac in barley water, to make the expectoration easy, and afterwards going into the air well cloathed.

This,

10 *Of recent Coughs from taking Cold.*

This, says he, is a much more easy, natural, and effectual method, than the practice by *Balsams, Linctus's, Pectorals*, and the like trumpery in common use, which serve only to spoil the stomach, and hurt the constitution.

By the method of practice with cloying *Linctus's*, and other such pectorals, one might be inclined to think that medical professors had found a shorter passage to the lungs, than by the tour of circulation ; but as we know that no medicine of that kind, can pass immediately into the lungs, without inciting a violent cough, 'till it is again expelled ; so pectoral medicines that pass there by the common road, must be greatly altered in their quality before they arrive at the injured parts.—But where coughs are occasioned by a dripping of acrid serum from the glands, upon the rim of the wind-pipe, 'tis certain, that the irritations thereby occasioned, are often removed, by smearing the parts over with such mucilaginous bodies, as gum lozenges, linseed tea, liquorice juice, quince seed infusion, and such like, without their passing into the lungs at all.

If the cough should be attended with difficulty in breathing, blood should be taken from the arm ; the ammoniac solution above mentioned, made by dissolving two drams of the gum  
in



in half a pint of barley water, should be given three or four times in a Day, to the quantity of three, or four spoonfuls; or a tea spoonful of Oxymel squills as often, in a draught of barley water, or linseed tea. If too much heat, or fever attends, a dram, or two of nitre should be taken daily in a quart, or more of barley water, or liquorice ptisan; and the tamarind purge, or manna and salts should be given every other day, to carry off the redundancy by stool and urine.

Two or three spoonfuls of honey beat up with the yolk of an egg, a little sweet oil, and lemon juice is often found serviceable; and when the cough is teasing in the night, a spoonful of diacodion may be taken going to bed, or a tea spoonful of paregoric Elixir.



## C H A P. III.

*Of Fevers in General.*

**B**Efore we enter on the treatment of particular fevers, we shall premise in general, that those of an inflammatory kind are supposed to take their rise from an obstructed perspiration, or a stoppage of the cutaneous discharge by cold, which generally proves the occasional cause of inflammations within, and other feverish complaints. The physical intentions of cure, are the reducing the feverish powers, or force of circulation

lation to proper bounds ; considering the fever as an effort of nature to relieve herself, by thus endeavouring to remove the offending cause.

As an obstructed perspiration is by far the most frequent cause of fevers, it becomes matter of moment to restore this excretion, and to expel the Humours, which occasioned the disease.

The fever itself rightly moderated, and restrained within proper bounds, and limitations, is said to be the best remedy for the separation, and expulsion of the feverish cause ; for art can avail only in regulating properly the powers of life, and circulation ; so that the force of the fever may not so much prevail, as by the increased motion of the blood, to prove fatal to the body ; or, on the contrary, that the powers of nature may not so much languish, and flag, that there should be wanting the degree of heat and fever necessary for separating, or making the feverish matter fit for expulsion :

Let it be remembered however, that the great *Sydenham*, in the latter part of his life, treated most fevers with repeated bleedings, and cooling physic, with an anodyne at night ; and with the greatest safety and success ; neither waiting for, or expecting this critical matter.

Thus

Thus we see, that to lower the force of the fever, bleeding, and evacuations are chiefly recommended; However, to promote the circulation, when the powers of nature flag, warm cordial medicines are thought necessary: this is the grand hinge, on which modern, as well as ancient practical physic moves; on a due attention to which, the physician directs his operations, and gives his assistance accordingly.

The curative intention therefore, on this principle, will consist in emptying the vessels, and attenuating the dense, rich sizy blood; and this end can be effected only by copious bleedings; gentle cooling purges, and attenuating salts, with plenty of warm diluting liquors given intermediately; it is thought however by some, that the feverish cause may at first be removed by antimonial medicines, and that the crisis, or termination of the fever may be greatly accelerated thereby. *Vide* Numb. xii. of the dispensary.

It may be necessary to remark, that bleeding not only lessens the quantity, and velocity of the blood, but it also makes room for the entrance of diluting liquors into it.—Proper dilution is necessary in all fevers, especially in the ardent, and inflammatory; for in these the blood is render'd too thick, and viscid, by the  
dissipa-



diffipation of the thinner parts of it, and the remaining serum is more and more incrassated, or jellied, by the great and continued heat : So that cooling thin diluters are necessary to supply the continual waste of the lymph, and serum, and to keep the whole mass in a due degree of fluxility.

As to the manner of dilution, the sick should be allowed to drink as freely, and as often as they please, of toast and water, barley water, with a little orange, or lemon juice, &c. but not to load their stomachs with too large draughts at a time : they should drink little and often, rather sipping it down, than swallowing at once in a full draught.

We find, from the strongest admonitions of nature indulged with success, that in most fevers we may safely allow a few currants, cherries, strawberries, raspberries, and mulberries, in the summer season ; the juice, or jellies of which mixed with water, may be substituted in their room, when they are out of season, with apples, or pears baked : and those whose circumstances will afford them Pine apples, China oranges, citrons, and lemons, may also be regaled with the pulp, and juice in moderation, provided there be no tendency to purging.

However,

However, severe the discipline of some may be, in prohibiting such grateful indulgence; under proper limitations, no doubt on't, they may be admitted with safety, and perhaps with advantage; as they allay thirst, and abate the fever; correct and attemper the heated bile; gently dispose the body to laxity, and promote the secretion, and discharge of urine.

A constant confinement of the patient in fevers to bed, is often pernicious, especially in hot weather; there are few fevers, where he might not be taken out of bed, and set up an hour daily; it would cool and refresh him, prevent light-headedness, and both increase, and facilitate the passing a quantity of urine; but, he should never be taken up, when in a breathing, and promising sweat, tending to a critical termination.

The bed should be made daily, while he sets up, and the sheets, as well as the patients linnen should be changed every two days. Nothing contributes more to continue the fever, and delirium, than constant confinement to bed, and not permitting the change of his foul linnen, and sheets, loaded with putrid steams, and humours; which contribute not only to keep up the fever, but even to heighten it into some degree of malignity.

It is of the utmost importance that the air in the sick bed-chamber should not be kept hot, the mildest degree of warmth being sufficient: the windows in summer should be open'd twice a day, or oftener, for an hour; at the same time, a door should be open'd also, to procure an intire renovation, or change of the air in the room: Care should be taken however, that the patient be not exposed to the stream, or current of air, by closing the bed curtains. In winter it may be sufficient to keep a window open for a few minutes only, by way of ventilator; and to correct the foul air, and restore its spring, a little vinegar may be poured on a red hot shovel, and the floor may occasionally be sprinkled with the same: these directions are of more importance than are generally imagin'd, for nothing can be more pernicious to the sick than the stified air of a hot bed-chamber, as the natural spring of the air is destroyed thereby.

From hence, the charitable dispensers of medicine will see the great probability there is of doing mischief, though with the best intentions, for want of proper knowledge in material circumstances. The benevolent benefactor, thus apprised, will therefore, it is hoped, give the indigent sufferer cooling salts, and nitre, instead  
of



of hot sweating powders, surfeit water, or *Venice treacle* ; will send them barley broth, or, small whey, instead of meat broths, or strong possets : In short, 'tis to be hoped, they will be convinced that hot *Sudorifics*, or sweating medicines, have been the bane and destruction of thousands ; as the fever is thereby excited, and the patient as it were scorched up ; so that were he defended from the injuries of the air, and supplied with plenty of good water, he would have infinitely the better chance of recovery, than by such preposterous treatment.

Let us only observe, how opposite to the intentions of nature, is this method of giving heating medicines, &c. the burning skin ; the dryness of the mouth ; the flame coloured urine ; the longing after cooling drinks ; the pleasure, and sensible relief they enjoy from fresh air, are so many proofs of a fire within, that calls aloud to be quenched ; and should undoubtedly point out to us every means we can think of, that can attemperate, and moderately cool the sufferer under such circumstances.

Nor ought less attention to be paid to the loathing and propensity to vomit, and to the foul contents ejected ; which must necessarily corrupt all aliments superadded to them, and convert them into their own putrid state : for

these reasons, all kinds of animal food, or broths prepared from them, must be highly injurious, and should be totally abstained from.

After a gentle puke, which is often absolutely necessary to relieve the stomach of its putrid contents, the remainder should be diluted, as before observed, with plenty of cooling, opening, and refreshing drinks, to attemperate, and promote an easy discharge of them: The food should be no other nourishment than panada, barley, oatmeal, or rice gruel; unless, now and then, if faint, or low, a few spoonfulls of *Boerhaave's* decoction of bread, made by boiling half a pound of bread for an hour, in three pints of water in an earthen vessel close stopt: then strain it through a sieve, and add to a pint of the decoction, half an ounce of lemon juice, and four ounces of rhenish wine, with sugar enough to make it palatable.

Thus, by early abstinence, and suitable evacuations, with plentiful dilution; the *generality* of acute diseases, or fevers, might be effectually removed; or the force of them so greatly broken, that the cure of the most threatening, might be facilitated thereby, with little assistance from medicinal helps.

Yet, how opposite to this treatment, is the method of those who apprehend all colds, and  
beginning

beginning fevers, are to be cured by sweats, and them too, procured by heating medicines: nothing can be more erroneous, or in general more pernicious: for such discharge untimely promoted, carries off the thinner part of the blood, leaving the mass more viscid and inflamed; when it should be our endeavour to increase it by plentiful dilution.

Besides the *Venice* treacles, harts-horn, and other hot medicines given to extort these sweats; a close apartment, and a load of bed-cloaths, is generally superadded: by these means the patient is suffocated with heat, and the tainted air he is forced to breath in; which two circumstances alone are sufficient to produce a fever even in a healthy person.

Who that has visited such patients, has not on entering their apartments, felt his own breathing oppressed; from which he has been relieved only by opening the windows, and admitting the pure and refreshing air? Nor has the patient been less sensible of the benefit, after having breathed for some time in an atmosphere polluted with the continual steam of his own body; but seems reanimated, as it were, with the admission of the salubrious particles.



In short, whenever it may be thought necessary to procure gentle breathing sweats, on sudden colds, and slight fevers, occasioned by checked, or abated perspiration; the method we have already laid down is the most proper and successful, by drinking plentifully of warm diluting drinks with acids, and mild sudorifics joined with them.

It may be necessary however to repeat, that as the stomach is principally affected in the beginning of most fevers, so a puke is often found to be of the greatest service; by throwing off any impurities there collected, and preventing their passing into the blood: a gentle purge also to cleanse the bowels and liver, of any bilious, or putrid contents lodged therein, is in general also very beneficial; as in some epidemic and contagious disorders, the source of them is originally lodged in the stomach, liver, and first passages; and the fever may thus be nipt as it were, in the bud, by an early removal of the original cause.

### C H A P. III.

#### *Of the Inflammatory, or burning Fever.*

**T**HE symptoms which denote this fever, are a hardness and fullness of the pulse; an excessive heat; great thirst; preceded by a remarkable

*Of the Inflammatory, or burning Fever.* 21

remarkable coldness, and shivering; a violent head-ach often attends, and sometimes a light-headiness at the height of the fit, which rises considerably every evening. The body is costive, and the urine very high coloured, hot, and made in a small quantity. The skin is commonly dry, though sometimes, a temporary sweat ensues; great restlessness attends, with little or no refreshing sleep.

The patient under these circumstances, should be put under a strict, temperate, diluting regimen: No meat, or meat broths of any kind should be given; the food should be simple panada, barley, or oatmeal gruel; and when the attack is violent, nourishment should be wholly omitted, and diluting liquids only given.

Blood should be drawn off, and repeated, 'till the hardness of the pulse sensibly abates: In general, the quantity to be taken away, is to be determined by the strength of the patient, and his pulse; by the intenseness of the fever, and vehemence of the symptoms, as to pain, difficulty of breathing, &c. The first bleeding, should in young, and full habits be considerable, to the quantity of twelve, fourteen, or sixteen ounces of blood: If the pulse is not softened thereby, nor the above symptoms abated, it shews the necessity of drawing off

## 22 *Of the Inflammatory, or burning Fever.*

more blood, to the quantity of ten, or twelve ounces the next day; and a third bleeding must be put in practice, in robust habits, the following day, should the pulse still continue hard, the blood fizy, or the symptoms of inflammation persevere. In order to form a better judgement of the quantity that should be taken away, a finger should be applied to the pulse in the other arm, while the patient is bleeding; and if the operator finds it flag considerably, flutter, or intermit, it is time to desist; if it beats stronger, or more open, he may proceed with safety.

A gentle lenient purge of manna, cream of tartar, the purging salts, or tamarinds, is always of the greatest service to cleanse the bowels, and may be repeated every other day; and, for this purpose also, cooling emollient glysters may be thrown up daily, which by relaxing the parts in the lower belly, derive from the head, and chest, and promote a discharge of urine.

The use of external fomentations, or tepid bathing to the feet, arms, and body is not so common in this country as abroad; but they certainly must be very efficacious in supplying the blood with moisture through the absorbing vessels; they must also greatly tend to open the obstructed



*Of the Inflammatory, or burning Fever. 23*

obstructed tubes, and produce a general relaxation of fibres, now commonly too rigid: The skins, and bladders of animals, when very dry, will transmit nothing; but when moistened, water, &c. will pass through their pores.

Proper dilution is absolutely necessary in all fevers, but more particularly in this. The patient should be frequently drinking small draughts of barley water, sweetened with honey, or sugar, and made gratefully acid with the juice of lemons, and oranges; or spirit of vitriol. The emulsion N<sup>o</sup>. iv. may also be drank of liberally, with baum, and sage tea for a change; thus we follow nature, our best guide, that earnestly demands these diluting liquors.

If, notwithstanding these evacuations, and diluting regimen, the fever runs high; instead of heating medicines to promote sweat, and smothering the patient with a load of cloaths, and a heated air; let him be kept up in the day, and give him twenty, or thirty drops of sweet spirit of nitre, or of spirit of sulphur, every three, or four hours, until it becomes more moderate; a scruple, or half a dram of purified nitre, may be given in a draught of the above liquors in the same manner: this latter is however apt to offend some stomachs, unless it is well diluted with

#### 24. *Of the Inflammatory, or burning Fever*

the barley water, or almond emulsion: if it does, it must be taken in less quantities.

There seems indeed little more necessary in the treatment of this fever, than proper and well timed evacuations, and plentiful, cooling dilution, with a few nitrous medicines, and the acid juice of vegetables: indeed, most other inflammatory distempers might be cured in the same manner; if we had sagacity enough to know how to keep the vital powers within due bounds, neither suffering them to rise too high, or to be depressed too low: this is the happy medium, which the sagacious Physician has ever in view; who when he finds the heat too intense, and the pulse too full, lowers both by proper evacuations, and more cooling regimen; if too deficient and low, they must be raised by cordials and blisters, or a more generous diet: In the former case, the diluting liquors must be small, in the latter more wine must be added to them.

The method however of treating inflammatory fevers by antimonial preparations, is recommended by many Physicians, as highly beneficial: they are best given in such doses as will gently puke, and should be repeated at the distance of twelve, or sixteen hours, for once,  
twice,

twice, or at most three times; giving the saline mixture, N°. ix. intermediately; or the cooling nitrous medicines above recommended: if the powder should not operate by stool, the bowels should be kept open by the above lenient purges, or a proper quantity of glauber, or Rochelle salts: the dose for an adult may be a scruple of calcined antimony unwashed, with half a grain, to a grain and a half of tartar emetic, proportioned to the constitution, and manner of operation; or in some cases the powder N°. xii. may be given to the quantity of five grains, every four, or six hours; and will frequently answer the intention, by procuring gentle evacuations by stool, vomit, and urine.

Before we close this Chapter, it may be necessary to observe, that the first appearances of amendment, are a softning of the pulse; a sensible abatement of the head-ach, (which after evacuations, sometimes demands a blister;) a greater quantity of urine, and that less high coloured, with an approaching moisture of the tongue: about the seventh, ninth, or fourteenth day, a pale, or pink coloured sediment is observed in the urine, attended with kind, gentle, universal sweats, and refreshing sleep.

If



## 26 *Of the Inflammatory, or burning Fever.*

If the fever however should return periodically, or at stated periods, every twelve, or twenty-four hours, and be terminated by sweats, and the above urine; the bark then must be taken every two, or three hours, as the stomach can bear it, in the intermissions of the fit: for this purpose, an ounce may be divided into twelve portions, and taken in wine and water: The same quantity should be repeated for security; though now it need be taken only thrice a day: should it purge, three, or four drops of liquid laudanum, may be taken with each dose, till that symptom is controuled.

The increase of danger in this fever may be discovered by the continued hardness of the pulse, though there is an abatement of its strength; by the ramblings, and confusion in the head, a difficulty in breathing, and an alteration in the voice: the belly is often swelled, and the urine suppressed; a constant delirium succeeds with great anxiety; the hands and fingers at this period are incessantly in motion, as if feeling for something in the bed cloths. At the approach of these symptoms, timely alarm should be taken, and the best medical assistance sought after that can be obtained.

Thus have we laid down the general method of treating this fever: but as a more expeditious

*Of the Inflammatory, or burning Fever. 27*

ious way of removing it, has of late years been introduced into these kingdoms ; by which, it is supposed, that the obstructed animal secretions are sooner rectified ; and the fever in consequence thereof removed ; or that the crisis, or termination of it by stools, urine, or sweat, is accelerated thereby : whoever is disposed to put this method in practice, (and a very good one it is, on the first attack of the fever) may, after reducing the pulse by proper bleedings, either give *James's* powder according to his directions, or the antimonial powder above mentioned, which operates in a similar manner ; and we readily confess they are often attended with extraordinary success.

We must beg leave however to observe, that if these antimonial medicines do not answer our expectations in the early days of the fever, we must by no means obstinately persevere in their use alone, but have recourse to different remedies. Dr. *James's* own directions, and cases, justify this caution ; where he frequently calls in other remedies, as auxiliaries, to the assistance of his medicine ; and instead of considering it as a universal medicine in all fevers, has honour and candour enough in his daily practice, to renounce the use of it in many.

C H A P.

## C H A P. IV.

*Of putrid malignant Fevers.*

**T**HIS fever is generally preceded by a great dejection and heaviness, and sometimes by an excessive head-ach, or stricture across the forehead ; the tongue is white and furred ; the teeth are foul ; and the breath smells disagreeably : The eyes always appear full and heavy ; the pulse languid and unequal. The dejection of spirits, weakness, and faintness are very often surprising great ; the breathing is laborious, and interrupted with a kind of sighing, and sobbing. Little spots of a brown, and livid colour appear about the neck, back, and breast, the more florid however, the less is to be feared : the appearance of these eruptions is uncertain, sometimes on the fourth, or fifth ; sometimes not till the eleventh day : a general efflorescence like the measles, in which the skin appears of a dusky red, and as it were marbled, and variegated, frequently appears ; and in the course of the fever, tremblings, and convulsive twitching in the face and hands, as well as in the arms, and legs generally ensue ; the feel of the skin throughout is remarkably hot, and of an uncommon ardour.

In



In the beginning of these fevers, some blood may be taken from the *strong, and robust*, where there is a redundance; but in general, we must not be too prodigal of this vital fluid, for as the spirits seem to be as much affected as the blood, we may thereby weaken too much the powers of nature. In truth, bleeding in a contagious disease, seems not indicated; because the contagion is intimately mixed with the humours, and by drawing off a small part of the blood, you very little lessen the whole contagion.

On intimately mixing, says *Huxam*, any ferment with a liquor to be fermented, you cannot destroy the fermentation by drawing off part of the liquor; for every part of the liquor, when in fermentation, is a ferment; so contagion received into the blood operates on, and in every part of it. By cooling indeed, and adding acids, you may moderate the fermentation; and when it is too violent, you may prevent the splitting the vessel (if too full and close shut) by giving proper vent: So in contagious fevers, by drawing off blood, you may lessen its quantity, and prevent it from over distending, inflaming, and rending the vessels, and lessen the heat, which might otherwise greatly augment the

the force of the contagion. But, if you cool the fermenting liquor too much, and prematurely suppress the fermentation, you render the whole vapid, and roapy, and it never purifies itself by a proper disputation, or becomes a good vinous liquor : how far this analogy will hold good, with regard to the human fluids, we presume not to say.

Recourse should be had to the best assistance that can be obtained, for the treatment of this fever; for it requires the utmost sagacity, and diligence, in watching the various changes, and symptoms, and availing of them by a critical and judicious application : In general, the stomach and bowels should be cleared by a vomit, and gentle purge; and as this fever is never compleatly judged, or carried off, 'till more or less of a sweat issues, our principal efforts, it is said by some, should tend to open the pores of the skin, not by too forcible, or violent hot medicines and regimen; but, by endeavouring to promote, and support it by plentiful subacid diluents, and gentle sweaters; such as may dilute, and wash of the salts, temperate the acrimony, and prevent the further putrescence, and dissolution of the blood, and strengthen the tone of the solids.

To answer these intentions, the vegetable, as lemons, oranges, &c. and even mineral acids,

as oil of sulphur, vitriol, &c. must be highly serviceable, not only given in barley water, &c. as for common drinks, but joined occasionally with those medicines which open the pores of the skin, and brace up the vessels. Thus the decoction N<sup>o</sup>. xiv. and xv. may be given every four, or six hours, to the quantity of three or four spoonfuls; but when the eruptions increase, (a certain proof of the increase of malignancy) the bark should be joined with them, as in N<sup>o</sup>. xvi. for it is to these medicines we must have recourse, as to our sheet anchor, to prevent the further dissolution of the blood, and the total putrefaction of the body. *Huxam's* tincture of the bark may also be given for this purpose, to the quantity of two, three, or four drams, every four, six, or eight hours, in any vehicle.

As these fevers are apt to run out to a great length of time; supporting drinks and diet are necessary; without which, the patient will sink. In this view, a generous red wine must occasionally be given as a cordial, the best, perhaps art can supply; and at the decline of these fevers, is of the highest service, especially when acidulated with the juice of seville oranges, or lemons. It may be impregnated also with some aromatics, as cinnamon, seville orange rind, to which a few



few drops of elixir of vitriol may be added. The *Asiatics*, and other nations, where pestilential disorders are more rife than with us, lay more stress on the juice of lemons in these fevers, than on the most celebrated alexipharmics. But it is not in these only, but in many other things, that we seek from art, what all bountiful nature most readily, and effectually offers us, had we diligence, and sagacity enough to observe, and make a proper use of them.

This is the most general method of treating this fever : but there are those of eminence in the profession, who have deviated from this beaten track, and recommended, that the air the patient breathes, should not only be continually renewed ; but that we ought to procure for them a current of cold air, which will refresh and strengthen them ; especially when great danger is apprehended from lowness, and faintness with heat.

It is their opinion also, that more success will attend this method, and giving laxative medicines, as the case may require, than by endeavouring to keep up the patients pulse, and strength, by cordial medicines, and blisters, until nature shall have carried off the disease by gentle sweats.

Farther,

*Of Putrid malignant Fevers.* 33

Farther, That a close room, and hot air, are always extremely prejudicial in this, and indeed all kinds of fevers, as they dispose them to turn putrid : and as the flesh feels intensely hot, and biting, the patient should not only be slightly covered, but drink freely of simple water, or barley water made as cold as possible, in order to allay, and lessen the intense heat, both externally, and internally.

The reasons assigned for this innovation, are from the observations which our military Physicians made in the late wars ; where it was very remarkable, that of those soldiers who were most exposed in putrid fevers, to a currency of cold air, through a temporary shed erected for them ; a much greater number recovered, than of others who were better accommodated with fires, and close apartments ; and to the influence of the cold air, these amazing salutary effects were in a great measure attributed.

It is remarkable also, that the *Neapolitan* Physicians, in the advanced state of malignant fevers, depend principally on the patients drinking plentifully of cold water, to the quantity of a pint every hour ; or once in two, or three hours, according to their age, strength, and constitution ; and this course they pursue

### 34 *Intermitting Fevers, and Agues.*

for days together, with very extraordinary success. How far these methods may be carried in our climate, practical observations only can determine; but considering the little success attending the general treatment of putrid, and malignant fevers, the adopting this under certain limitations, may be well worth future consideration.



## C H A P. V.

### *Of Intermitting Fevers, and Agues.*

**T**H E S E fevers may be divided into two classes, those of spring, and those of autumn; and have different appellations according to the length of the interval between the fits. If the fever returns every day, it is called a *Quotidian*; if there is a day between each fit, it is called a *Tertian*; if the return is after being two days free, it is named a *Quartan*; and a *double Tertian*, when the fit comes every day, but is in one alternately light, and in the other severe.

The usual symptoms are gaping, lassitude, cold, shiverings, paleness of the extremities, anxiety, sickness, and sometimes vomitings; the pulse is feeble and small, the thirst considerable. The body then grows red, the anxiety diminishes,



nishes, the pulse becomes fuller and stronger, the heat insensibly augments, 'till it becomes extream ; the thirst is excessive ; the patient complains of violent head-ach, and pain in all his limbs : Lastly, a general sweat succeeds ; all the above symptoms diminish, and the patient falls into a sleep ; after which, he wakes without fever, his pulse is natural, and there remains nothing but lassitude and weakness. The urine then deposits a pink coloured, or brick dust sediment : in the spring intermittent, it is less red, forms a cloud in the middle, and deposits rather a white sediment, which is a good symptom.

During the fit, it will be sufficient to take a large quantity of any diluting liquor, made agreeable to the palate ; but always warm : Small negus, or thin white wine, or vinegar whey, will answer this purpose, but nothing stronger : if the fever runs high, the pulse be full and hard, bleeding at this period is generally necessary, especially if the patient be young, or of a full habit ; or there has been a suppression of any natural evacuation : but it is indispensably so, when violent pains in the head, side, or breast, accompany the hot fit.

Intermittent fevers will vary considerably according to the state of the air, and constitution

### 36 *Intermitting Fevers, and Agues.*

tion of the patient. Some have a natural tendency to the inflammatory, and will frequently degenerate into a continual fever, if too hot, a regimen, or medicine have been used.

The cure of this fever depends on vomits, gentle purges, saline medicines, and the bark.

If the tongue is foul, with a bitter taste in the mouth; if there be sickness, with load and oppression at the stomach, attended with retchings, or vomiting, it will be proper to give a vomit; which should be taken an hour or two before the return of the fit, and be workt off with plenty of chamomile tea: if stools are not procured thereby, the bowels, should be cleansed by a dose of rhubarb, or other gentle physic; but more especially if the belly be hard, or swelled. The saline draughts may then be taken every four hours; or four spoonfulls of the mixture N<sup>o</sup>. ix, may be taken in the same manner.

It is better to decline giving the bark in the spring ague, 'till three, or four fits are elapsed, when ulcerated pustles frequently break out about the lips and nose: but should the fits continue after that period, and the treatment above recommended; an ounce of Peruvian bark should be divided into twelve parts, and one

*Intermitting Fevers, and Agues.* 37

one should be given every two, or three hours, during the intermission of the fit; and repeated night and morning for a week, or ten days.

Autumnal agues are more obstinate than those of the spring, and as they are generally of a bilious disposition, the stomach, and bowels should be cleared of their putrid contents, by vomits, and repeated purges with rhubarb, before the administration of the bark; otherwise, great mischief may ensue from the confinement of the bile, by a premature use of it: Critical sweats, and a brick dust sediment in the urine, after the close of the fit, are certain indications of giving it safely, in the manner above recommended, with due repetitions.

The same cause which produces this fever, frequently also occasions disorders, which return periodically at the same hour, but without shivering, heat, or any remarkable quickness of pulse: Thus local pains in the head, over one eye, temple, or jaw, shall return regularly at a stated period; and last the usual time of a regular fit, and terminate without any sensible evacuation. No other medicine can remove this excruciating complaint, but the bark, which must be taken liberally, between the fits, or intervals of pain; and be repeated, as above directed, 'till three



### 38 *Intermitting Fevers, and Agues.*

ounces are taken ; indeed, sometimes more is required to prevent the relapse of an autumnal intermittent, nor is danger to be apprehended therefrom.

It may be of use however to the young practitioner, to lay down some general rules, for the administration of this celebrated medicine, as an improper use of it, sometimes produces bad symptoms, by stopping the fit for a while ; when it often returns with worse symptoms, or changes to a continued fever.

In young, sanguine constitutions, spring agues or intermittents, as above observed, often turn to inflammatory fevers ; especially if bleeding, and gentle physic, have not preceded the use of the bark : and as in such habits, the blood is often sizzly, no bark should be given 'till it is attenuated, and broke by nitrous, and saline medicines, a cooling regimen, and gentle evacuations : In such constitutions, when the fits are shifting, and irregular ; bleeding, and a cooling purge, will often reduce them to a regular type, and sometimes a repetition of both is necessary ; especially if cough, pains in the head, breast, or side, accompany the fit, with redness of the face, or inflamed countenance : the hardness of the pulse, and the sizzlyness of the blood,

blood, must be the indications for repeating the bleedings.

The bark should never be given, when the belly is hard, and inflated, the urine of a deep red tinge, and the complexion of a yellow hue; 'till the liver, and biliary ducts, with the bowels, are properly cleansed, by rhubarb, or other gentle purges, and saline medicines: in short, care should be taken, that no other disease be combined with the intermittent fever, which might be aggravated by the bark.

It sometimes requires great address, to direct the bark, in some periodical fevers, where the sizzly blood shews the inflammatory state of it, and the high coloured urine indicates the obstructed state of the liver, the patient sinking perhaps under the violence of every fit. Under such circumstances, after repeated bleedings, and purges, with saline medicines, have weaken'd the force of the above symptoms, though perhaps not conquer'd them, and have paved the way for curing the intermittent part of the fever, with the bark; the patient must not be suffered to sink for want of it; though at the same time due attention must be paid to the obstructed liver, or inflamed blood, in giving it.

## 49 *Intermitting Fevers, and Agues.*

To this end, nitre, the neutral salts, sal armoniac, and rhubarb should be joined with the bark; or, in such cases, it is often necessary to give the bark on one day, or even on one part of the day, and to give a gentle purge, and saline medicines on the other, till every symptom of inflammatory obstruction be removed: when the bark may be given alone; interposing now and then, a rhubarb purge; especially, if costiveness, or yellow skin, or high coloured urine, or any other symptom of internal obstruction, or impurities, should indicate the use of it.

We shall close this Chapter, by observing, that sometimes the bark alone, will not succeed in the cure of some obstinate intermittents; which will submit to it, when given in larger doses, or when joined with other auxiliaries. Thus, a dram of bark, joined with half a dram of *Venice* treacle, and the juice of a moderate lemon, given an hour before the fit, and for three nights after, seldom fails, if repeated: and in some robust habits, and damp climates, an infusion of two ounces, in a quart of brandy, taken for three, or four days, (a small wine glass full, every four, or six hours,) effectually terminates some agues, as give not way to the bark taken in substance: for various other forms, consult N°. xix. and xx.

To



To gratify the curiosity of some of our readers, we shall insert some extraordinary remedies, for the cure of this, sometimes very obstinate disorder; which have often proved successful, when regular medicines have failed.

Thus, three spoonfuls of lemon juice, or vinegar, with the same quantity of brandy, and water, taken in bed, an hour before the cold fit, often prevents it, especially if repeated for three or four subsequent nights. A spoonful of flower of brimstone taken in a glass of white wine, in the same manner, has frequently been attended with similar success.

*Boerhaave* directs a dram of alum, two drams of nutmegs, and twelve grains of bole armoniac, to be taken as above, before the accession of the cold fit. He likewise recommends two ounces of the tops of green rue, with two drams of mustard seed bruised together, to be applied to the wrists for this purpose.

*Morton* advises equal parts of *Venice* turpentine, and olibanum powdered, to be applied in the same manner, a little before the fit; and a scruple of chamomile flowers finely powdered, with half the quantity of calx of antimony, and salt of wormwood, to be taken every six hours.

The following has been frequently used with success: Take powdered frankincense two drams,  
saffron

## 42 *Intermitting Fevers, and Agues.*

saffron ten grains, salt half a dram, foot ten drams, and the yolk of an egg; mix them together, for plaisters to be spread on leather, and applied to the wrists as above.

Equal parts of stinging nettles, cobwebs, and salt beat together into a pultice, and applied in the same manner, has cured numberless children; and where medicine cannot be got down, these external applications may be safely made use of; nor ought they to be despised.

Dr. Berryat, a *French* Physician avers, that he has found our *Sydenham's* liquid laudanum, more infallable in the cure of intermittent fevers, than even the bark itself. He gave to adults from twenty, to thirty drops, in a cup of infusion of centaury, an hour before the cold fit was expected; to children he gave ten drops, and to infants five.

Nor must we omit the famous *Irish* remedy, so often found successful; viz. half a dram, or more of the snuff of mould candles powdered, with the same quantity of nutmeg, given before the cold fit, and repeated for three, or four times daily.

We shall conclude with mentioning the blue, or Roman Vitriol, which may be given from a grain to two grains, dissolved in a cup of water, or gruel, and repeated twice, thrice, or four times

times in twenty-four hours, during the intermission of the fit: these, with many others, are often found successful, though we cannot account for their manner of operating.



## C H A P. VI.

*The Miliary Fever.*

**T**HIS fever takes its name from the pustles, or little bladders full of water, resembling in shape, and size, the seeds of millet: these eruptions are either red, or white, frequently mixed: they are sometimes tedious in coming forth, and are preceeded by great heat, faintness, sighings, difficulty of breathing, and oppressions of the breast; which distinguish them from other eruptive fevers: there are no eruptions so uncertain, or inconstant as the miliary; they generally appear where the sweat is most abundant, as on the breast, neck, back, and between the fingers, which are often much swelled; though no part of the body is free from them. The red pimples, are less dangerous, than the white; and if the eruption be compleat, the symptoms disappear, or are greatly lessened; but, if the eruption is imperfect, the fever and other symptoms will continue, 'till fresh pimples are thrown out;



out; and this, sometimes even to a third crop, if too heating medicines have been used.

Of whatever kind the eruptions be, if the pulse is full, and the strength will permit, some blood should be taken away, otherwise it may be omitted: It has been observed, that the red pimples bear bleeding better than the white: to assist nature in the expulsion of the eruption, gentle perspiratives should be given, as N°. xi. with a few grains of saffron, or nitre, as the fever is more or less intense, or the inflammation prevails. The blood should be diluted by drinking plentifully of small thin whey, barley water, and the herb teas, in order to separate the sharp humour from the blood, and fit it for passing through the pores of the skin, the glands of the kidneys, or other out-lets of nature.

If on the appearance of the eruptions, the oppressed breath, and other symptoms do not abate; or, if on their decline, the head, or breast, should continue to be affected; or if the eruption should suddenly disappear, immediately recourse should be had to blisters, which should be shifted to different parts, in order to draw off the impure serum, and prevent its fixing on the internal parts.

This fever often runs out to great lengths, ending sometimes in a fatal thrush, and hiccups:  
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where the thrush is white, and attended with a plentiful spitting, the distemper is terminated that way; but when black, and the spittle is discharged with difficulty, a suffocation too soon succeeds: The crisis however is generally by sweats, which are singularly fetid; the urine also appears more saturated; the pustles disappear with great itching; drying up, and falling off in branny scales; and sometimes the skin, but more particularly of the hands, and fingers, peel off intirely. Gentle physic is necessary to carry off the remains of the disease.

This fever is peculiar to lying-in women, which we have animadverted on, in its proper place. We shall conclude therefore with observing, that when some years since, this fever made great havock at *Straßburgh*, even among men of robust constitutions, and all remedies had been tried in vain; a good midwife was remarkably successful, in throwing up rain water glysters, and unsalted butter, at the height of the disease, and giving plentifully for ordinary drink, a quart of spring water, half a pint of generous wine, the juice of a lemon, and six ounces of the finest sugar, gently boiled 'till a scum arose: by this remedy, the belly was loosened, the greivous symptoms vanished, the patients were restored to their senses, and snatched from the jaws of death.

This

## 46 *The Heëtic Fever, or Consumption.*

This disease is certainly best treated by a temperate, diluting regimen, and mild diaphoretics; and rather with *cooling*, than heating remedies; lenient glysters are very properly exhibited, during the course of this fever.

The experienced *Huxham* says, he is persuaded that the common method of treating miliary fevers by very hot, sweating medicines, has been the bane of thousands; and that the sole end of medicine, should be to assist nature in her operations, and support her under them; but in such a manner as may comport with the general laws of the animal œconomy. — This indeed, is the true arcanum medicinæ; on a thorough knowledge, and execution of which points, the principal part of physical science depends; and which is to be obtained only by sedulous observation, and experience, in a mind turned to physical disquisitions.



### C H A P. VII.

#### *Of the Heëtic Fever, or Consumption.*

**T**H E great *Radcliffe*, long since observed, that the consumptive people of our climate, were in general strumous, or inclined

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*The Hectic Fever, or Consumption.* 47

to the evil ; as the tubercles, or little knotty glands of the lungs, evidently shewed on dissection.

We mean not to lay down here the physical treatment of hectic, or consumptive people, in the different stages of those distempers ; but must observe that as a sharp, or acrimonious state of the fluids, is in general the principal cause, or source of every evil symptom attendant on it ; so the ax should at once be laid to the root, and a proper regimen, and diet entered on, to correct this poisonous acrimony, and discharge it from the blood. This can be effected only by a long, and resolute perseverance in a milk, or vegetable diet, abstaining from animal food, and from whatever will increase the sharpness of the juices ; to this purpose, the milk of asses, goats, or cows, should be drank of liberally, and butter milk, whey, &c. should be used as common drink.

The diet should be soft, smooth, and nutritious, and such as will obtund the acrimony of the fluids ; as new laid eggs, chocolate made with milk, salep, sago, vermicelli, harts-horn gelly, turnips, parsnips, viper broth, snails boiled in milk, and *Bristol* water drank at the fountain head : this last celebrated remedy operates, perhaps chiefly, by diluting the sharp particles in  
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#### 48 *The Hectic Fever, or Consumption.*

the mass, and washing them out of the blood by urine, or other excretions; by a perseverance in which for some weeks, we frequently see patients, on the first attacks of hectic, or consumption, compleatly cured. But, above all things, riding must not be forgot; being the best kind of exercise, and highly beneficial in these distempers.

As the diet should be light, and easily digested, we strongly object to the usual one of boiled calves feet, under the notion of its being a strengthner; which we apprehend can prove only such, when digested by the stomach of a porter; as the strong, glutinous, and attractive particles of cartilages, and tendons, cannot be easily broke to pieces, by a tender, weak stomach, which would much readier digest a beef steak: as a restorative in emaciated cases, we recommend the white of a new laid egg, mixed with barley water, or beaten up with a little fine sugar, and a quarter of a pint of milk, and the same quantity of spring water, twice, or thrice a day; with skimmed milk, and thin barley water, for common drink, and salep for breakfast, and supper: as air, and exercise are principally to be depended on, in all consumptive cases, so ought they to be rigorously pursued.

We fear, that balsamic medicines in general avail little, in this disorder, unless as palliatives. Thus the cough may be occasionally relieved by small bleedings, soft pectorals, diacodium, and paregonie elixir. — The sweats may be controlled by various preparations of the bark, to which the elixir of vitriol may be joined; and scapulary issues, or setons made on the sides below the ribs, have often been found of great use, in particular constitutions.

The hectic fever, is best removed by small bleedings, saline medicines, and a cooling diet; and colliquative sweats are safely checked by lime water, drank to the quantity of a pint a day, softened with a little new milk. Spitting of blood, demands frequent bleeding, if the pulse can bear it; otherwise gentle opiates, nitre, and the bark, with fifty, or sixty drops of tincture of lead every three, four, or six hours.

Alteratives are undoubtedly the principle medicines, to be depended on, for the cure of incipient consumptions; such as will correct the sharpness of the fluids, and prevent the growth of tubercles, or little hard knots in the lungs; which generally terminate in ulcerations. Mercury, and antimony, are principally to be relied on for this purpose, but require the direction of a skillful hand in the administration: for this end also, the antimonial powders may be given



in small quantities; or *Huxham's* antimonial wine, with a decoction of *sarsaparilla*, for some weeks, or months.

We shall close this Chapter, by a remarkable instance of the powers of antimony in this distemper. A Gentleman in the last stage of it, was sent into the country, in order to try the last remedy, asses milk: He drank it under the direction of an eminent physician, who was surprised to find that it not only purged him, (a common incident) but vomited him also. The patient however, notwithstanding these evacuations weakened him; soon found his breath relieved, his spirits better, and a general amendment in his constitution. The Doctor therefore advised him to persevere; and as the milk grew familiar to his stomach, the vomiting, and purging, gradually abated, 'till it agreed perfectly well: In fine, the Gentleman recovered; and the vomiting power of the milk, was attributed to the ass drinking her water out of a trough, impregnated with liver of antimony; several lumps of which were discovered in it, and had been occasionally put there, for the use of hounds, who used to drink out of the trough. How far the milk of the ass, might be saturated with this powerful medicine, by this process of nature, we submit to the ingenious reader; but think it no bad hint, for the use of mild antimonials

antimonials, given as alteratives, and correctors of the blood, and juices, in this deplorable malady; and perhaps the tincture of antimony above recommended, taken with the sarsaparilla decoction, might be as proper as any for the purpose.

We apprehend, that the natural balsams, and gums, as Gilead, Tolu, Peru, Copivi, olibanum, &c. usually directed for the cure of ulcerated lungs, do in general, more harm, than good, by the heat they occasion, and the hectic fever that they augment. We suspect also, the efficacy of *particular balsamic* medicines taken internally, beyond the stomach, and bowels; from the great change they undergo by digestion, and the commixture of them in the circulation with the general mias; though we confess, they arrive, with their virtues *less altered* to the lungs, than to any more distant bowel: a decoction of the bark, with balsam of Tolu, is perhaps one of the best.

Fumigation indeed, is the most natural, and easy conveyance, of these kind of medicines to the lungs; and when they are so contrived, as not to irritate too much, must, certainly be more efficacious; for which purpose, the fumes of benjamin, colts fool, and many other pectorals are used; consult *Bennet* on consumptions. But alas! with all our medicinal helps, how little do we more, than procrastinate the fate of such unhappy sufferers; when it is not in the

power of air, exercise, moderate bleedings, and a proper regimen to restore them; for these perhaps, are principally to be depended on, with *Bristol water*.



### C H A P. VIII.

*Of the Rheumatic Fever, and different Kinds of Rheumatism.*

**T**HIS distemper begins with an universal shivering, followed by heat, thirst, restlessness, and fever: after a day, or two, the patient feels a sharp pain, which often affects the tendinous expansions covering the muscles; not confined to one place, but moving from one limb to another; The joints of the wrists, the shoulders, the knees, and different parts of the body, are also in this manner successively affected, which often become red, and swelled. It sometimes passes from the loins, to the hips, or upper joints of the thighs; where if it remains long fixed on their capsulæ, or the coats of the nerves, the cure becomes very difficult; nor do the internal parts escape its fury: if the brain is attacked, a delirium ensues; if it falls upon the lungs, the patient is suffocated; and if it attacks the stomach, and bowels, it is attended with the most severe pains, caused by an inflammation, which frequently degenerates into a gangrene.

This



*Different Kinds of Rheumatism.* 53

This fever, which arises originally from obstructed perspiration, must be treated like others of the inflammatory kind; by antimonial powder, by repeated bleedings, by glysters, or opening drinks, with tamarinds, and cream of tartar; and a cooling diluting regimen, consisting of sweet, or vinegar whey, which should be drank in large quantities: apples coddled, stewed prunes, and well ripened summer fruits may be safely indulged.

Nitre is often an excellent medicine in this fever; and where the stomach can bear it, cannot be given too liberally, especially when joined with camphor: The sick therefore, with plentiful bleeding, should be enjoined to take a scruple, or half a dram of nitre, with a fourth part of camphor every six hours; or to drink for some days successively, the greatest quantity of smooth boiled water gruel, his stomach can bear; in a quart of which, two drams of nitre is dissolved, with, or without sugar: by this method, some robust people have taken six, or eight drams of nitre, in twenty-four hours, in three, or four quarts, of this diluting drink. So much nitre cannot in general be administered without danger of too much irritation of the stomach, unless it is given in copious draughts.

of gruel, barley water, or such soft attenuating drinks; where it disagrees, the quantity must be lessened.

When the nire becomes tolerable to the stomach, half a dram of it may be dissolved in a little boiling water, and when the solution is cold, it may be given every second, or third hour, diluted with half a pint, or thereabouts, of warm water gruel, barley water, or sage, balm, or mint tea: such quantities, in three, or four days, seldom fail to relieve the patient, and very often to cure him intirely, by the most plentiful, and profuse sweats: another advantage arising from it, is, that by lightly stimulating the intestines, one, or two copious stools are produced, and thus the necessity for purging, or repeated glysters, are hereby often obviated.

In some constitutions the antimonial powder may be given in small quantities; in others, the fever is best treated with a spoonful of Mindererus spirit, given every six hours in whey, keeping the body open with gentle physic.

If the pain, and swelling of the joints remain, after the fever is abated by repeated bleedings; apply three, or four leeches to the part, where the inflammation, and tumour are greatest, and let the blood ooze till it stops of itself, the repetitions need not be limited.

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## *Different Kinds of Rheumatism.* 55

When the fever goes off, and the patient seems recovering, the pain often moves from one joint to another; in this case, half a dram of *Venice* soap, should be taken morning, noon, and night, with a draught of *sassafras* tea, and forty, or sixty drops of *antimonial* wine; and the articulations should be lightly rubbed, with a piece of dry flannel.

It happens likewise, that the patient, though otherwise recovered, has a fixed pain left about the articulation of the hip. Apply in that case a blister about the size of a crown piece, upon the part, for twelve hours; then take it off, and pierce the bladder it has raised, that the lymph collected may flow out, and cure the wound with common cerate. Eight days after, the place, where the blister was applied, is healed, apply another, and proceed as before; and if the pain is not then entirely removed, this operation may be repeated four times.

Observe, when you take off the blister, only to pierce the bladder, and not take off the skin, for the place thus made bare, would be extremely painful, and without any advance to the cure: this method is advised by *Vansweiten*,

The sick may be greatly assisted, by putting one strong towel always under their back, and another under their thighs, in order to move



them more easily. When their hands are without pain, a third towel hung upon a chord, which is fastened at cross the bed, must considerably help them in moving themselves.

When the pains are extremely violent, the joints may be wrapt up in the Rye poultice, N<sup>o</sup>. lvi, or oil skin Bootekins: fomentations, and vapour baths, conveyed to the parts, if often used, and for a considerable time, prove very efficacious. A half bath, or an entire bath of warm water, where the patient should remain an hour, after sufficient bleedings, afford the greatest relief; by the use of this, on going to bed, an incredible sweat is often produced.

There is another species of rheumatism, which arises from the serum of the blood, which becomes sharp, and acrimonious; and lodging on different membranes, and nervous parts, occasions the most excruciating pains. This kind will not bear the use of the lancet, bleeding doing more hurt than good. In such cases the great *Sydenham* advised living for several days together on whey alone; and a little bread after the fourth day, was allowed for dinner, and supper. *Boerhaave* being severely attacked by this distemper, adopted this method, and lived for six weeks, on sweet whey, and bread only. Kind breathing

breathing sweats, give often great relief, and help to carry off the distemper. The antimonial wine, mixed with a fourth part of Thebaic tincture, and given to thirty, or forty drops every six hours, generally answers this intention well, with plentiful dilution.

This scorbutic rheumatism is not attended with fever, and is often very difficult to remove; especially when it fixes on the head, the insertion of the biceps muscle, the loins, or on the hip; there is no part however, where this pain will not invade.

The treatment of this disorder, as before observed, depends on diluting the acrimony, and sharpness of the humors, by drinking largely of whey; or of the compound lime water of the shop; The burdock decoction N°. xiii. or a strong infusion of buckbean. One, or other of these should be drank, to the quantity of two, or three pints in a day, to which may be added, a tea spoonful of antimonial wine; or in some cold constitutions, thirty, or forty drops of the tincture of guaiacum, may be thus taken, two, or three times, in a day.

The purging powder N°. xxvii. may be interposed, once in three or four days; and in some robust constitutions, the shop medicine, called

called *Coriococtinum*, may be given, to the quantity of two or three drams: ten grains of calomel given the night before the purge, has sometimes added to its efficacy, particularly in gross, phlegmatic habits.

In others, a scruple of gum guaiacum, and cinabar, or the same quantity of fresh powder of arum root, taken twice a day, has been given with success; the latter was a favourite medicine of Sydenham's, and much depended on by that experienced practitioner; the guaiacum is in general esteem, taken alone, or steeped in rum, or brandy, and given in proportionate quantities.

The supporting a free perspiration, by five grains of the antimonial powder, taken twice, or thrice in a day, has sometimes removed rheumatisms, which had resisted the force of other remedies; nor has a decoction of sarsaparilla, with the antimonial wine, been less successful in others, when properly persevered in.

The cold bath has sometimes removed obstinate pains of this sort, which would not yield to internal medicines: and warm water pumped on the part has with others been equally successful. Cupping, continual blisters, the bark, and a variety of other medicines, have their different advocates: and as this distemper often baffles the skill of the most experienced, we have



for that reason inserted this variety; which must be adapted to the particular constitution: but we desire, that, among them all, flannel, and warm cloathing may be particularly attended to, as of the utmost consequence.

When by the long continuance of pain, the affected joint becomes rigid, and stiff, let the part continue for some time every day, over the steam of hot water; then let it be wiped with hot linnen, and afterwards be anointed with marshmallow ointment, or neats feet oil.

When the rheumatism is confined to a particular part, fomenting with warm emollient decoctions, and afterwards rubbing it with the volatile, or soap liniment, often gives relief; and the application of cupping glasses, and blisters thereto, frequently remove the disorder.

A plaister of quick lime and honey, is said to have cured some sciaticas; and the application of seven, or eight cupping glasses, on the raging part, has sometimes been attended with uncommon success. Blisters, setons, and caustics, and even burning the part with a hot iron, have, in some obstinate cases, been found the most efficacious remedies; and where the dread of the latter has been insupportable, cylinders of cotton fired, have been substituted in their room, and cured the most obstinate of these disorders.

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These cylinders are prepared, by including a roll of cotton, about the length, and size of a finger, in a piece of linnen rag, tied round with a thread, with a flat basis, that it may stand upright on the part it is to be applied on : the top, or upper part is to be set on fire, and suffered to burn down to the part affected : two or three of these cylinders, may be applied at the same time, and the burnt parts should be kept running, by dressing them daily with warm basilicon, or any other soft ointment.

Many old, and obstinate sciaticas, have been cured by this method ; and by repeated applications, when they have proved uncommonly stubborn. They are by no means so painful as may be apprehended ; and as they do not carry with them the horror incited by the hot iron, are often submitted to by the most timid : The latter is however, more dreadful in idea, than in reality ; and since it has been banished modern surgery, we have been deprived of a noble remedy, in many, otherwise, incurable disorders.

The cure is supposed to be effected, by discharging from the burnt parts, the acrid juices, now shed out of the vessels, and lodged in the cellular membrane, which the fire has pervaded : the locality of pain seems to favour this opinion ; and the porous, or sponge like communication, throughout

throughout the cellular membrane, will readily admit its discharge, when it has been sufficiently penetrated by fire : and sometimes even with caustics, the same effect is produced.

Thus have we laid down the general plan of treating rheumatic disorders : when attended with fever, and sizy blood, it should be treated as other inflammatory fevers, by repeated bleedings, nitrous, and cooling medicines, gentle openers, and plentiful dilution.

When the pains are not attended with fever, the warm, attenuating medicines, gentle sudorifics, and plentiful dilution, with simple whey, or the infusions above recommended, are principally to be relied on ; with the various other remedies adapted to particular circumstances and constitutions : for no one specific remedy can be depended on, how much soever boasted, in a distemper attended with such variety of circumstances, in different habits.

We shall conclude this Chapter, with observing, that some very obstinate disorders of this kind, are sometimes removed by cupping, and sweating at a bagnio, and then going immediately into a warm bath, where the part should be well brushed for some time : On coming out of the bath, the patient should be put  
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into a warm bed, and drink plentifully of hot negus.

Where this method cannot be complied with, *Ward's*, or *Dover's* sweating powder, may be tried every night for a week, laying between the blankets, instead of sheets, and supporting the sweats, by drinking plentifully of hot whey.

There are some cold rheumatisms, that will submit to a spoonful of bruised mustard seed taken daily; or to a pint of whey, turned by boiling a large spoonful of fresh mustard-seed in milk, and taking a pint every night going to bed: forty, or fifty drops of spirit of hartshorn also, or of the antimonial wine, taken twice in a day, is found very serviceable in some constitutions, if persevered in for some weeks: and in some strong habits, where the distemper has been long rivetted, very small quantities of tartar emetic, half, or a quarter of grain, taken two, or three times a day, in a cup of gruel, is not only a cheap, but a very effectual remedy for this purpose. If it should occasion much sickness, or vomiting, it should not be taken so often, but this symptom will generally disappear after a few days taking.

When the sciatica affects strong, robust constitutions, *Dr. Cheyne's* method may be tried; which

which consists in giving one, two, or three drams of ætherial oil of turpentine, in triple the quantity of honey, in a morning fasting, for a week, intermitting now and then a day : large draughts of whey should be taken after it, in order to dilute, and make it set easy on the stomach.

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C H A P. IX.

*Of the Slow, Nervous Fever.*

**T**HIS fever ought to be particularly delineated, for the sake of the young practitioner, as well as the patient ; who may fall a victim to so insidious an enemy, by his mismanagement.

It generally attacks those of weak nerves, and a relaxed habit ; and comes on with slight chills, and uncertain flushes of heat, attended with a kind of lassitude, and weariness ; great heaviness, and dejection of spirits ; and more or less of a load, pain, or giddiness of the head. A nausea, and disrelish of every thing soon follows, with a considerable thirst, and a frequent inclination to vomit : though these symptoms may be suspended for some hours, yet they are aggravated towards night, with an oppressive breathing, and a quicker, but weak pulse. A  
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kind of heavy pain is felt on the top of the head, taking the course of the coronal sutures, and often pain, and coldness, affect the hinder part also.

In this state the patient continues for five or six days, restless, anxious, sighing, and dejected; with little or no sleep, though sometimes drowsy, and heavy; the pulse, during all this time, is quick, weak, and unequal, sometimes fluttering, sometimes slow, and intermitting. The urine is commonly pale, and often limpid, frequently of whey colour, and without sediment. The tongue at first is neither dry, or discoloured, but after some days appears dry, red, and chapped, though the patient scarce ever complains of thirst.

About the seventh, or eighth day the giddiness, pain, or heavyness of the head greatly increase, with a constant noise in the ears; the oppressions of the breast increase; frequent faintings ensue, especially on motion; a delirium comes on, with universal tremors, and difficulty in swallowing supervenes, with hiccups, twitching of the nerves, and tendons, which ends in a profound coma, and eternal sleep; for farther particulars, consult the accurate *Huxham*.

From the history of this fever, it is evident, that neither bleeding, or any considerable evacuations



evacuations are proper; though sometimes it may be necessary at the beginning, to cleanse the first passages by a gentle puke, a little rhubarb, or manna, &c. but nothing stronger.—Clysters of milk, sugar, and salt, may be injected with safety, and advantage, every second, or third day, if there be a deficiency that way.

The temperate, cordial, diaphoretic medicines are most proper in these fevers; such as the fever powder N°. xi. to which a few grains of saffron, and castor may be joined; and when restlessness, and want of sleep, demand quieting medicines, thirty, or forty drops of the paregoric elixir may occasionally be added.

When the confusion, and dejection of spirits are very considerable, galbanum, with a little camphor may be joined to the above, and blisters should be then applied to the neck, back of the head, or behind the ears: during this period, the patient should be supported with thin white wine whey, some pleasant ptisan, or gruel, with a little wine; of which they should drink freely, to supply the blood with wholesome fluids, and support the sweats; as they are never so easy, as whilst they are gently promoted. In this view also, thin chicken broth is of service, both as food, and physic, especially at the decline;

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cline ; to which jellies of hartshorn, sago, panada, may be joined, with a little wine, and the juice of seville oranges. In short, as these fevers sometimes run on to a great length, the patient must be supported by the above nourishment, gentle cordial medicines, and more blisters, if necessary, to controul the delirium, and discharge the impure serum. To compleat the recovery, some light preparation of the bark, or *Huxham's* tincture is necessary, interposing now and then a gentle dose of rhubarb.



## CHAP. X.

### *Of the Scarlet Fever.*

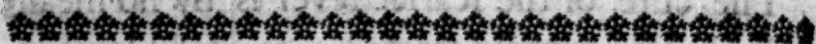
**T**HE scarlet fever reigns chiefly among children, and begins with coldness, and shivering, without any violent sickness : Afterwards the skin is covered with red spots, which are larger, more florid, and not so uniform as the measles. The redness remains two or three days, and then disappears ; when the cuticle falls off, and leaves behind it a sort of mealy scales, scattered over the body, which appear, and disappear, two or three times. The glands of the throat, and neck, are often swelled, and frequently ulcerate.

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The cure of the scarlet fever is by no means difficult, if properly treated ; as it seldom requires any thing but plentiful dilution, with thin liquids, and that the circulation of the fluids may be kept within due bounds. The patient is by no means to be kept violently hot, or should heating medicines or diet be given, which aggravate the symptoms, and bring on a delirium. In this case, a blister should be applied to the back, and a few grains of nitre, should be given in barley water, instead of hot cordials ; which are preposterously given by some, on these occasions ; if the fever runs high, an emollient glyster may be thrown up, and daily repeated, after drawing off a proper quantity of blood.

When the fever goes off, the patient should be purged three, or four times. During the whole stage, the throat and neck should be kept warm, 'till the swelled glands subside ; and the throat should at first be frequently gargled with vinegar, water, and honey, and when sloughed, with tincture of roses, and honey ; to which a little tincture of myrrh may be added. Honey of roses sharpened with spirit of sea salt is proper also to touch the sloughs with : if by bad management, they should prove malignant, treat them as the putrid sore throat. *Vide Chap.*





## C H A P. XI.

*The Method of treating Fevers by the Antients, and some Moderns, so far as it relates to cool Air, and cold Water.*

**I**T is much to be feared, that the several theories, invented by speculative men, for the cure of fevers, have been the chief impediments to the art of healing; and that the practice of too many, has been adapted to a pre-conceived theory, instead of consulting the indications of nature; those only criterions of truth, and certainty.

We shall therefore give a short account of the method, which the antients, those faithful observers of nature, made use of, in their treatment of acute fevers; from whence perhaps, we may be induced, to adopt their practice, so far as is *consistent with our climate*: for as success, in the cure of some fevers, has not justified any particular theory, yet advanced; it has been, thought high time, by some; either to revive the old method, or to set out on a new foundation; especially as the antient cooling method, continued 1500 years, and there is the strongest reason possible, to think the practice was well founded, and attended with success.

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That the antient Greek Physicians, attempted to extinguish fevers by cool air, and cold water, many passages in *Hippocrates* manifest; and that he depended much on the latter; even to the giving of it *extreamly cold*, when the fever did not remit, but run high; with other medicines joined with it occasionally.

The elegant *Celsus*, who collected together the most approved practice of his predecessors, says, that, in a burning fever, the patient should be kept in a spacious room, where he can draw a great deal of pure air; and not be suffocated by many cloaths, but be very lightly covered; that cold water should be given *copiously*; and that the patient may drink to satiety, in order that the bowels, or internal parts may be sufficiently cooled: this done, he is to be well covered with cloaths, and after a remission of heat, a sound, and long sleep ensues, with a great sweat, and immediate relief.

Many other antient authorities might be quoted for this practice, from the *Greek, Roman, and Arabian* writers on physic. *Vide Lommius*. As for the modern, and present practice of the *Italians, and Persians*, we shall subjoin their particular methods, at the close of this Chapter; where it will be seen, that, at this day, they cure ardent fevers, by an extinction of heat, in the

70 *Method of treating Fevers, by the*

very manner of the antients ; proportioning the degree of cold, to that of heat ; and continuing its use, 'till the abatement of *inward heat*, and the pulse foretel, that the disorder is entirely subdued.

It is not to be doubted, that, in inflammatory distempers, small pox, and many other fevers, thousands are destroyed by heating medicines, and regimen ; by keeping the scorching patients too much in bed, and depriving them of the benefit of fresh, cool air. Our *Sydenham* long since declared, that neither frequent bleedings, nor the most cooling medicines did service, unless the patient was kept out of his bed, several hours in the day, in all inflammatory fevers.

There is not a more refreshing cordial to a person sinking under extream heat, than *fresh air*, coming in contact with his body ; besides the use of its being inspired, and cooling the blood, circulating constantly through the lungs ; it extinguishes the preter-natural heat on the surface of the body ; and though the ventilating a sick bed chamber, has undoubtedly great advantages, by procuring a pure fresh air to breathe in, yet, the being exposed to cold air, has a superior claim, for the reasons above given ; as indeed is evident, from carrying a person into the



the open air, who has fainted away, or been overcome with the heat of a close room.

The stomach being replenished with frequent draughts of *cold water*, it seems very natural to suppose, that all the adjacent parts, with the blood, and humours circulating therein, will partake of the advantage, by abating their heat, and retarding their motion : and according to the different degrees of coldness made use of, the effects will, as *Hippocrates* says, be like cold water, poured into a vessel of hot, or when the vessel itself is exposed to the cold wind. And as we well know, that immersing the legs, and feet in warm water, for a certain time, will produce a temporary fever ; and accelerate the motion of the blood, returned thus heated into the mass, by a constant circulation through the legs, and feet, while they continue in this fervent state ; why should we entertain the least doubt, of similar effects being produced by the cool air, and water, constantly received into the lungs, and stomach ; fanning, and cooling the blood circulating within the chest, and belly.

But it must not be understood, that every fever is to be cured by this method ; or that by this method, all other medicines, suited to the genius of the fever, whither *Attenuants, cordials, antiseptics, blisters, &c.* should be neglected ; for it

will often be necessary to invigorate the patient, and to extinguish the fever by cold, at the same time ; that our intention in promoting a regular, from a languid circulation, may not be defeated; and that a regular motion in the blood be preserved, least where extream cold is necessary, life should be extinguished with the heat.

'Till farther observations, have confirmed this practice, carried to its full length, as in *Persia*, and *Italy* ; it would be both prudent, and safe perhaps, not to push this cooling method farther, in this particular climate of ours, than banishing heat ; prohibiting close rooms ; suffering the patient to be only slightly covered, exposing him to a current of cold air ; and permitting him to drink liberally of simple water, or barley water as cold as possible : by which means, as before observed, the blood circulating through the lungs, the whole surface of the body, and parts near the stomach ; the largest veins, and arteries, with the heart itself, will have their heats so allayed, and lessened, by the application of these cold fluids, that he may be sufficiently cooled, both externally, and internally, to prevent any danger arising from excess of feverish heat : and this method may be so directed, as to concur, and cooperate with warm, stimulating medicines, so as to increase the  
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power, action, and force of the heart, and vital parts, without increasing the fever.

We shall conclude this Chapter, with observing, that a late ingenious writer, has endeavoured to overturn the generally received opinion, that a fever is *an effort of nature* to expel some morbid matter from the blood; and that a *concoction* of it, must necessarily precede the crisis of a fever. In refuting these opinions, he affirms, that all fevers are merely *Symptomatical*, and so far from being an effort of nature to assist herself, they increase, and protract the disease, by the irregularity they cause in the circulation.

Certainly, says he, the secretions, and excretions are best performed in a regular state of health; and is it not more likely that morbid matter will be carried out of the body, when the circulation of the blood is regular, and the fluids in a tranquil state, than when they are hurried *quaque versum*, by a violent commotion of the blood? It would be impossible to separate water, and oil, in violent agitation; but if the motion was gentle, they might be separated by strainers suited to the purpose: again, if the feverish matter is to be separated by an intestine motion, or ferment in the fluids; the fever is  
against



against us ; as it constantly tends to remix this heterogeneous matter, that otherwise might have been expelled.—Ought it not therefore to be suppressed, that nature may remove the disease without interruption ?

The causes in general which produce fevers, are whatever will stimulate, irritate, and inflame the medullary part of the nerves, which is diffused over every fibre in the body : thus pleuritic fevers may be produced by some acrid particles in the blood, fixed on the pleura ; like a thorn in the skin, or the matter of a whitlow, which will produce both fever, and inflammation up to the shoulder : noxious particles in the air, and putrid matter absorbed into the blood, will produce a putrid fever, and infect the whole mass ; so that by correcting, or expelling the matter, like removing the thorn, which irritated the whole machine, the fever is removed, which was nothing more than a symptom. By the wound in inoculation, we know the variolous matter is irritating ; and as the fever ceases, on its being discharged from the blood, is it not plain, that the fever was only a symptom, in consequence of the whole body being irritated ? — The ingenious Essay of Mr. *Kirkland*, from which we have partly extracted the above, is well worth the perusal of those, who are not wedded

wedded to authority, or long prescription; or look not on free inquiries, as heresys in physic. For the sake of the curious reader, we here insert

*The Persian Method of treating Fevers.*

‘ Sir *John Chardin* himself was seized in the night, three days after he left *Gombron*, with a violent fever, and grew delirious within a few hours. The next and following days he had such fainting fits, that all, who saw him in them, thought him actually dying. He had no return of the fainting fits after the third day, but his fever still continued: Notwithstanding which, he found means of being carried to *Laar*, where he arrived at break of day, on the fifth day of his illness, and immediately sent for the Governor’s Physician, being suffocated with the heat of his fever, and so exceedingly low and faint, that when the Physician came, he could hardly speak a word to him. But the Doctor presently discovered that his patient had the *Gombron* fever, and assured him, it was a disease easily to be cured with proper treatment, and promised him, that, with God’s assistance, he would free him from it before night; tho’ both Sir *John* himself, and a *French* Surgeon, whom he had with him, thought that he had no chance of recovering. At nine o’clock the Apothecary’s servant brought the medicines that  
were

76 *Method of treating Fevers, by the*

were ordered, and staid to administer them. The first thing he gave him, was near a pint of emulsion, made with the cooling seeds; and soon upon it, an incredible quantity of a cordial confection, that contained all kinds of antidotes; and sometime after, about a quart of a nauseous bitter purging liquor; and as soon as this was got down, so much of the cordial confection, which possibly was Mithridate, as he took at first. These medicines, which were taken within the space of an hour, soon encreased his heat and thirst to an intolerable degree. His attendant then told him, he might drink as much, and as often, as he pleased; and mixing for him barley-water and willow-water in a large china bowl, and putting a large bit of snow into it, he gave him the bowl, when the snow was almost dissolved, that the liquor might be drank as cold as possible; and he supplied him with this exceeding cold and pleasant liquor, as often as he had an inclination to drink, which was very frequently, during the whole time his fever lasted.—The bed, on which he lay, was placed on the ground, in a large airy hall, the floor of which was every now and then plentifully sprinkled with cold water, so that it stood in pools all over the room. But his fever still encreasing, the Apothecary directed him to be taken out of bed, and laid

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on a mat, with nothing at all to cover him but his shirt; and at the same time employed two servants to fan him without intermission. All this however made but little or no alteration; for his heat seemed to be as intense as ever. Two large buckets of fresh cold water were then ordered to be brought, the patient was set on a chair, and supported by a servant on each side, whilst his Apothecary poured the cold water on his thighs, legs, and feet, beginning at the upper part of the thighs, and proceeding gradually to the extremities. After this, he poured cold rose-water on his head, face, neck, arms, and breast. The *French* Surgeon, who stood by, and saw all this, could contain himself no longer, but exclaimed, Oh, Sir, this fellow here is killing you! Instead of being cured of your fever in a few hours, as they promised you, 'tis certain you will be dead within that time! But the patient himself now plainly felt, that the fire, which had been burning up his inside, began to abate, and that he was recovering his spirits and strength: And his Apothecary, feeling his pulse, assured him, that his fever was on the decline; and indeed it went off so fast, that an hour after noon it was quite gone, and his pulse, as even the *French* Surgeon acknowledged, perfectly calm.—The purging liquor,

78 *Method of treating Fevers, by the*

liquor, which had not as yet produced any effect, except a fullness and distension of the bowels, began to operate, and continued to do so for about two hours, but without any pain, uneasiness, or disturbance. In the evening, he was ordered a mess of rice boiled in water, with some powder of Cinnamon and Pomegranate bark, which was the first nourishment he had been able to get down for five days. The next morning, when he awaked, he found that he had a slight return of his fever; but by repeating the emulsion, with the confection, and purging liquor, and drinking freely of the barley and willow-water, cooled with snow, as his Physician directed, he was in three days time entirely freed of his fever, and had no return of it afterward. The following is

*The Italian Method of treating Fevers.*

As soon as the dangerous symptoms appear in the advanced state of the disease, the patient, after fasting some hours, must drink every hour, or once in two or three hours, a pint or two of water cooled with snow, according to his age, constitution and strength, and this as well by night as by day, unless when he is asleep. And nothing at all besides is allowed until the fever is gone off, and  
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hunger begins to grow troublesome. Within a few days after this course of water-drinking hath been entered upon, the urine is almost constantly made in a large quantity; and a purging generally succeeds, which begins on the first, second, or third day. If it doth not, a laxative medicine or clyster must be administered; for when a purging comes on and continues, the fever and its threatening symptoms gradually abate and go off. But if there should be at any time an appearance of sweat, it must be immediately suppressed, by making the water, that is to be drank, colder, and giving it in a larger quantity; by uncovering the patient, and exposing him to a current of cold air; and by fanning him. Nay, some have gone so far as to sprinkle snow itself powdered on his skin; it having been observed, that a person, who sweats, whilst he is under this course, is in danger of losing his life by faintness. If a vomiting happens, which is not unusual on the first days, it will be of service, and should be promoted by drinking more frequently, until all the vitiated matter being carried off, nothing but clear water is rejected, and then the vomiting will soon stop of itself.—Several Physicians were at first afraid of trying this method, but its very great and extraordinary



extraordinary success, particularly in desperate cases, removed all their scruples, and there was not one at last, who did not recommend this water-drinking course to his Patients in malignant Fevers, as soon as they appeared to be in any great danger. See *Philosoph. Transact.* N<sup>o</sup>. 410. *Abridg. by Haimes and Martyn,* Vol. VIII. Part III. p. 635.

CH A P. XII.

*The Measles.*

**T**H E measles is an eruptive fever, attended with a general inflammation, and cough. Coldness, and shivering precede the heat, which is accompanied with sneezing, swelling of the eye lids, and a continual sleepyness; a serous humour destills from the nose, and eyes, which are certain symptoms of the eruption being at hand. In the face they are at first small, like flea bites, but they soon flow together in large spots; on the breast they are broad and red, not rising above the surface of the skin; they may be felt by a gentle touch of the finger, but the rising cannot easily be discerned by the naked eye, they appear generally at the fourth, and terminate at the seventh, and eighth day.

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This distemper should be treated as inflammatory, and in many respects like the small pox: blood should be taken away at the beginning, and should be repeated, if the fever runs high, and the cough, and oppression of the breast be great: a gentle cooling purge should be given early, to abate the inflammation, and an emollient glyster, with bran, and water, and a spoonful of coarse sugar should occasionally be thrown up; or the body otherwise be kept open, through the course of the distemper.

The patient should be kept cool, and as much as possible from bed, especially in the summer: heating medicines should be avoided, though they are too often given, under the notion of helping out the eruption: for they increase the inflammation of the lungs, which cannot be prevented, or subdued too soon; therefore in the height of the fever, it is often necessary to repeat bleeding; and at the end of the disease, when the branny scales are falling off, it will be a greater error not to open a vein, especially if the breathing be difficult, and the cough husky, and dry.

The treatment in general should be cooling, softning, and diluting. After bleeding, the antimonial powders may be given every six

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hours

hours, till the eruption is compleated ; when pectoral drink, barley water, with liquorice, or linseed, should be liberally drank, to which a few grains of nitre should frequently be added. To ease the cough, a soft oily linctus, or a spoonful of oil of sweet almonds, and syrup of marshmallow, may be given often ; to which a little oxymel may be added ; when the expectoration is difficult. To relieve the breathing, and divert the humours from the lungs, blisters are extreemly necessary ; and when there is danger of suffocation, from difficulty of expectoration, the vapour of emollient herbs should be received by the mouth into the lungs ; and if the distress be great, a proper quantity of oxymel squills must be given as a puke.

To support the spitting, and assist expectoration, half an ounce of the antimonial, or ipecacnana wine, may be added to half a pint, or more, of the Sperma ceti mixture, and this may be given often by spoonfulls. Towards the end of the disease, if the cough should be very troublesome, a little diacodium, or pargoric elixir may be given ; but opiates should be cautiously given at first : this distemper requires proper purging, when the eruption is gone off ; and if a dry cough, and hoarseness remain, the patient should bleed in small quantities ;



ties ; breath the vapour of warm water ; and live for some time, in a clear air, on skimmed milk and barley cheifly, or asses milk, to prevent falling into hectic, or consumption.



## C H A P. XIII.

*The Small Pox.*

**T**HE small pox is commonly divided into two kinds, the distinct, and confluent ; and these into the chrystaline, warty, and bloody sort.

The usual præcurfory fymptoms of this distemper, are chilness, and shivering, succeeded by intense heat ; a violent pain in the head, and back, with an inclination to vomit : a drowsyness, and sometimes fits attend children, under seven, or eight years of age, which are in general favourable fymptoms, (if bleeding is not used, and some mild cordial, or a blister be substituted in its room :) the eruptions commonly appear on the fourth day from the beginning ; if they come out sooner, they generally portend a bad sort : the pustles appear in the skin like flea-bites ; first in the face, next on the hands, and fore-part of the arms, on the neck,

and upper-part of the breast, and lastly, on the legs.

As the eruption appears, if the distemper is of a gentle kind, the fever almost intirely vanishes, as do also the pains, on the fourth day from the eruption; the spaces between the pustles, which hitherto were white, begin now to acquire a rose colour, and to swell; they are attended with throbbing, and pains, every individual pustle being now a little boil; which gradually increases, 'till the seventh day, when the pustles appear full of yellowish matter.

From this time they gradually become dry, or *turn* as it is called, and fall off in brown scales: As the eruption came forth on particular days, so they also wither, and fall off successively: the face is sometimes clear of them, while pustles are seen on the legs not ripened: when in the course of the distemper, the swelling of the face begins to subside, the hands and arms ought to puff up; and on their subsiding, the swelling of the legs should succeed: these changes are so necessary, that when they do not follow each other, danger is to be apprehended; and when the skin is not tense, and the interstices between the pock look pale, it is a bad sign.

In the confluent sort, there are the same symptoms, but much more violent; the eruptions generally appear the third day, sometimes sooner, which is a bad omen.

We shall lay down the general treatment of this distemper, it not being our design to enter minutely into particulars: the grand point has been thought to consist, in a due management of the particular constitution, and of the powers of nature. If the circulating fluids should be too much excited, or in other words, the fever run too high, bleeding, purging, and the cooling method of treatment becomes highly requisite; but, if the powers of nature should flag, the warm cordial medicines, and regimen should be put in practice; this is the language of the generality of Physicians.

On the first symptoms therefore of this distemper, bleeding is in *general* necessary, and in full sanguine habits should be repeated: Immediately after, a gentle purge should be taken, and repeated, even though the eruption, has made its appearance, if the fever runs high, and threatens: an ounce of manna, and salts, or such gentle physic is proper for this purpose. If the stomach abounds with phlegm, or bile, or is loaded with food unseasonably taken, a vomit should be given, otherwise, it may be



omitted. If the fever runs high, and the symptoms of violent pains in the head, and back, threaten a bad, confluent pock; every means should be made use of, to check the fever, and retard the eruption; by bleedings, evacuations by stool, a cooling regimen, and exposing the patient to cool air, in order to controul the inflammation: nor will there be any danger, by thus *retarding*, or totally *preventing* the eruption coming forth; for it has long been observed, that the later the eruption, the more kind the pock, and the more favourable the event:

The fever then, the *supposed* instrument of nature, to separate, and expel the eruption, should be checked, and kept within due bounds by cool air, and be restrained by a cooling diet, and keeping up as much as possible from bed. Cordials in *general* therefore should be avoided, and a load of bed cloaths on the patient is most pernicious; the curtains should not be close drawn; the room should be kept cool, and not heated by a fire; the fever should be restrained by nitre, and acids, given in barley water, small wheys, and such kind of diluters. In short, the event of this distemper depends on the first setting out, and on checking, and controuling the fever early, by the admission of cool air to the patient's body; there  
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are however undoubtedly cases, in some tender, delicate habits, where this method must not be carried to its full extent; and where mild cordials, and gentle stimulants may be necessary to excite the circulation, when too languid; which will readily be distinguished by the skilful and observing practitioner.

During the course therefore of the first part of this distemper, no broths, or meats of any kind should be taken; but plenty of small diluters, as barley gruel; preserved fruits boiled, such as figs, damascene plumbs, and tamarinds; small beer acidulated with orange, or lemon juice, spirit of vitriol, or oil of sulphur; whey turned with apples boiled in milk; boiling water thrown on sliced pippins; emulsions with barley water and almonds; rhenish wine and cyder, plentifully diluted; milk and water, and even plain water with toasted bread in it. The air of the room should be frequently renewed by a fresh current, and the patient in general kept cool, and as much as possible out of bed: a most essential circumstance to be attended to, through the whole course of the distemper, but more especially in the summer season.

A stool should be procured every other day, at least in the confluent pock, by means of a glyster, or by a proper quantity of manna, tamarinds, cream of tartar, or glaubers salts. The spitting, and pock, should be supported by drinking plentifully, and gargling frequently; which is often facilitated by injecting into the throat, warm barley water, and honey, with a little vinegar; and it is frequently of great use, to throw some up into the nostrils, and often thus to clear the scabs, which form within them: a small quantity of the antimonial, or ipecacuana wine, added to an oilv linctus, or sperma ceti mixture, will assist, and frequently recall the spitting; to promote which, when the spitting is viscid, the steam of emollient herbs, may be received into the mouth and throat, by means of a funnel.

If the pustles about the fifth, or sixth day, do not fill, and plump up; the skin between them swell, and look of a rosey complexion, and the pulse be low, and languid, give three, or four spoonfuls of the mixture N°. xxxiii, every six, or eight hours. But when the maturation is at a stand, and the fever, and pulse run high, let a few stools be procured by a gentle purge, or the body be kept open by



by glysters : after moderate evacuations thus obtained, to alleviate the foreness, and pain, an ounce of diacodion, or sixteen drops of liquid laudanum may be taken every night.

If the pustles appear flat, pale, and husky, and the skin is not swelled ; it is supposed, that the variolous matter is not properly secreted, and stands in need of blisters to the limbs, in order to attenuate the fluids, and discharge them from the habit ; but great skill is here required for their due application.

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*Malignant Small Pox.*

**T**HE chrySTALLINE, and lymphatic pox never maturate kindly, but the matter remains crude, and watery to the last : frequently, this thin, crude matter is absorbed into the blood, and leaves the pustles dented, empty, or siliquose.

In the treatment of this pock, the bark alone, or *Huxham's* tincture of the bark may be given to promote maturation. Blisters are much recommended by some to give vent to the acrid humour ; to warm medicines, diuretics should be joined, to promote a flow of urine, in order to compensate the deficiency of other secretions ;

secretions ; but the vegetable, and mineral acids are not of that service here, as they are in the small black, confluent kind, with livid, or blue spots ; especially when joined with the bark : When there is a suppression of urine, a glyster should be given, or a few Glauber's salts ; and the patient may be taken out of bed.

The best gargles are cyder, and honey ; or vinegar, water, and honey, or oxymel squills, to which a little nitre, or crude sal armoniac, may be added. Mustard, or horse-radish may be boiled in the gargles, when the spitting flags, and the saliva is viscid, and tenacious ; on this occasion, a vomit is sometimes necessary ; the oxymel squills frequently given, often answers this end, by gentle puking, and easing both expectoration, and breathing ; besides the advantage of promoting urine, and stools.

The linnen, and sheets, should be shifted, when grown foul, and stinking ; to prevent the air being polluted, and the patients breathing being affected thereby : at these times, the air of the room should be changed, by prudently opening both windows, and doors, in order to obtain a fresh current : and sometimes a fire may be made, to purify the offensive vapours. When the pock is malignant, and will not mature kindly, a cold infusion, or a decoction  
of

**T**HE only certain method of surmounting

In directing the preparatory regimen, he

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With this view, says he, I order the first class, to abstain, for nine, or ten days, previous to the operation, from all animal foods, meat broths, also butter and cheese, and from all fermented liquors, excepting now and then, a little small beer; from all spices, and whatever is of a heating quality. The diet is to consist of pudding, gruel, sago, milk, rice milk, fruit, pies, greens, roots, and vegetables of all the kinds in season, prepared, or raw. Eggs, tho' not be eat alone, are allowed in puddings, and butter in pye crust; and these to be eat in moderation. Tea, coffee, or chocolate are permitted for breakfast.

During this period, at nearly equal distances, the patients are directed, to take three doses of the following powder, either made into pills, or mixed with a little syrup, or gelly, at bed time; and a dose of glauher's salt, dissolved in water gruel, each succeeding morning.

The powder is composed of eight grains of calomel, the same quantity of the compound powder of crabs claws, and one eighth, part of a grain of emetic tartar: in order to facilitate the division of the doses, a large quantity is prepared at once, and great care taken to mix them intimately.

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This quantity is usually sufficient for a healthy strong man ; and the dose must be lessened for women, or children, according to their age, and strength ; the first dose is commonly ordered at the commencement of the course : the second, three, or four days after ; and the third about the eighth, or ninth day ; and he chuses to inoculate the day after the last dose has been taken. On the days of purging, broths are allowed, but the patient must abstain from unprepared vegetables.

Those of the second class, *viz.* tender, delicate, and weakly women, men of bad stamina, valetudinarians by constitutions, by illness, or intemperance, aged people, and children, require a milder course of medicine ; rather of the alterative, than purgative kind ; and in many instances, an indulgence in some light animal food, with a glass, or two of wine, in case of lowness, is not only allowable, but necessary to support a proper degree of strength. He condemns an indiscreet use of mercurials, but thinks children require a mild dose, or two, in order to cleanse their bowels of crudities, and as a good security against worms.

His method of inoculating, is by fresh matter, taken from the place of insertion, if the subject

ject is under inoculation ; or a ripe pustle, if in the natural way, on the point of a lancet, so that both sides of the point are moistened.

With this lancet, an incision is made, in that part of the arm, where issues are usually placed, deep enough to pass through the scarf skin, and just to touch the skin it self ; and in length, as short as possible, not more than one eighth of an inch.

The little wound being then stretched open between the finger, and thumb of the operator, the incision is moistened with the matter, by gently touching it with the flat side of the infected lancet ; this operation is generally performed in both arms, and sometimes in two places in one arm, a little distant from each other. Neither plaister, bandage, or covering is applied, or are in any respect necessary. If no inoculated patient is at hand, nor any one in the neighbourhood has a distinct kind of the natural sort, a thread may be used as in the common way, if used immediately after being charged with infecting matter.

He makes no scruple of having the person to be inoculated, and the patient from whom the infection is to be taken, in the same room ; so

little



little apprehensive is he of additional infection. He thinks it of no consequence, whether infecting matter be taken from the natural, or inoculated small pox ; or whether the matter be taken before, or at the crisis of the distemper. He has taken a little clear fluid from the elevated pellicle on the incised part, even so early as the fourth day after the operation ; he chuses, however, in general to take matter for infection, during the fever of eruption, as he supposes it, at that time, to have its utmost activity.

On the second day after the operation, he gives at going to bed, three grains of calomel, and compound powder of crabs claws, with a tenth of a grain of emetic tartar. On the tenth, or eleventh day, he says the above pill may be repeated, and on the following morning a laxative draught of two ounces of senna infusion, half an ounce of manna, and two drams of tincture of jalap, to procure three, or four stools : these are given as soon as the eruptive symptoms are perceivable, if they seem to indicate any uncommon degree of vehemence.

If these symptoms are remiss, or tardy, he directs the pill to be taken each night ; and  
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if it fails to operate, by stool, or there is the least disposition to costiveness, an ounce of glaubers salts; or the opening draught in the morning, once, or twice; as the case may require. This course he says, forwards the inflammation.

Instead of confining the patient to his room, or bed, when the symptoms of the eruptive fever come on, he is directed, as soon as the purging medicine has operated, to keep abroad in the open air, be it ever so cold, as much as he can bear, and to drink cold water, if thirsty; always taking care not to stand still, but to walk about moderately while abroad.

This point is looked on of so much moment, and the easy progress thro' every stage of the disease depends so much upon it, that he admits of no exception, unless the weather be extremely severe, and the constitution very delicate: and this the patient most readily complies with, after having experienced the benefits arising from it.

During the fever of eruption, medicine is seldom wanted, the cool air seems the best cordial; and if any uncommon languor happens, a basin of small broth, or a glass of wine,

## *New Method of treating the Small Pox. 97*

is allowed in the day, or some white wine whey at bed time, which are indeed at any time allowed to tender, aged, or weakly persons.

After the eruption is compleated, if occasion requires, they are indulged in a little well boiled meat of the lightest kind, as chicken, veal, or mutton.

The regimen above mentioned, the cooling alterative purges, and the free use of cool air, at the season of eruption, almost universally prevent either alarming symptoms, or a large crop of pustles. A few says he, I have seen with such a quantity of pustles, tho' distinct, that I have neither advised, nor allowed them to go out of the house : but the generality, when the eruptions are few, amuse themselves abroad with the pustles out upon them.



## C H A P. XIV.

### *The new Method of treating the Small Pox.*

**I**N the general treatment of the small pox, it has, 'till very lately been thought right, to forward by every gentle means the efforts of nature in producing an eruption; and if

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98 *New Method of treating the Small Pox.*

the fever, and symptoms run high, to keep the patient in bed, or at least to confine him to the house; plying him with warm diluents, in order to facilitate the eruption of the pock.

Experience however, justified by the success of thousands, has adopted a practice foreign to this, and almost totally different in many respects; for instead of endeavouring to assist nature, in pushing forth the eruptions, every method is made use of to retard, and protract them; instead of supporting a certain degree of fever as necessary for this purpose, by confinement to bed, and a warm regimen, every means is made use of, to controul the fever, that can be effected by fresh air, cold water, and evacuations by stool; esteeming the fever the grand enemy, whose force should be early abated, in order to retard the eruption and prevent their confluence. The favourers of this method reason thus.

The immediate sensible effects of going into the open air, says Dr. *Dymdale*, are a very great abatement of heat upon the whole surface of the skin, which tho' but just before intensely hot, generally in a short time feels not much warmer than that of a person in health;

*New Method of treating the Small Pox.* 99

health; the pulse from being very strong, full, and quick, become less hard, and full, the pain in the head is always relieved, and the patients are so sensible of the benefits they receive; that on the return of the head ach, when they go within doors to rest themselves, they have no objection to go back into the open air for relief.

By the stools, which the operation of the physic produces, the feverish, and internal heat, thirst, sickness, and pains, are for the most part considerably abated; the eruption is retarded, and diminished, by part of the variolous matter being thus carried off.

The faculty are certainly obliged to Mr. Sutton for *reviving* the cooling method of treating the small pox, and pointing out, to what lengths it may be carried. I say, *reviving*, because we are well assured from Rhases, that the *Arabian* physicians 500 years ago, practiced this method, by giving ice-water, the coldest acid diet, the juice of unripe grapes, and sallads; and directed the body to be kept open by some lenient purging infusion, in order to make the pustles fewer; which was to be continued, if the distemper should prove vio-

100 *New Method of treating the Small Pox.*

lent: He speaks much of repelling, and extinguishing medicines to lessen the fever, and moderate the eruption.

It is evident also from many parts of the writings of Sydenham, and his frequent complaints of the inveterate prejudices of physicians, as well as of nurses, in favour of hot air, and hot medicines; and the frequent embarrassments he laboured under, on that account; that he did not often dare to carry the cool regimen, to the full extent of his own ideas of its propriety. The treatment of his disciple Dr. *Dovar*, plainly shews, that when he was at full liberty, he carried his cooling method much greater lengths, than in his common practice.

Whilst I lived, says *Dovar*, with Dr. Sydenham, I had my self the small pox, and fell ill on *twelfth* day. In the beginning I lost twenty-two ounces of blood. He gave me a vomit; but I find by experience purging better. *I went abroad* by his direction, still I was blind, and then took to my bed. I had no fire allowed in my room. My windows were constantly open. My bed cloaths were ordered to be laid no higher than my waist. He made me drink twelve bottles of small beer, acidulated



*New Method of treating the Small Pox.* 101

acidulated with spirit of vitriol, every twenty-four hours. I had of this anomalous kind to a very great degree; yet, never lost my senses one moment. This is the strongest proof of that great man's opinion, from his long experience, of the treatment of this disorder in general; and is a confirmation of the propriety of the *Suttonian* method, who have carried his notions into execution, with greater latitude and extent, than he himself ventured to do.

The fire also at *Blandford*, in the year 1731, at which time upwards of 150 persons were ill of the small pox, and exposed to the open air, is another strong proof of the little danger to be apprehended from fresh air. All these unhappy people, on account of the rapidity of the flames, were obliged to be carried instantly into the fields, where many of them remained several days and nights. Beds were laid for them under the hedges, and under the arches of bridges, where the ground was dry; and yet, notwithstanding the sudden exposure to the air, one person only died, *viz.* A young woman, who was almost expiring at the time when she was removed.

*Dr. Dimsdale*, to whom the world is much

### 102 *New Method of treating the Small Pox.*

obliged, for his accurate account of the present method of inoculating for the small pox, has been pleased to favour us with the effects of the same treatment, applied to the *natural* small pox; the following is the method he pursued successfully, in forty cases.

He says, when he has been called in early, and symptoms, with other concurring circumstances induced him to think the small pox was at hand, he has directed the same management, as is recommended by him, in the foregoing Chapter, on inoculation. When he has not been called, 'till some pimples have already appeared, he has advised getting the sick person into the open air, and has generally ordered his pill, with a laxative to be taken some hours after it, in order to procure three, or four stools; and this method he has sometimes repeated, where the pock has threatened to be bad, and the symptoms portended great danger. As the patients commonly complain of being very low, and faint, after these evacuations, they are allowed thin mutton, or chicken broth, milk pottage, or tea, as the most grateful, and refreshing cordial; nor are they permitted to enjoy this refreshment, but in the day time, and upon the bed, for he always dissuades them from  
going

going into it 'till night; being satisfied that the eruptive fever is thereby mitigated, and the eruptions themselves repressed, and actually diminished by the evacuations, and cooling regimen.

From the time of compleat eruption, to that of the accession of the fever of maturation, he advises the taking the same pill, as was prescribed in the eruptive fever; to be repeated at intervals, 'till the maturation advances, at which time it must be discontinued: He directs also a cup full of a solution of two drams of cream of tartar, and an ounce of manna, in a quart of barley water, to be taken after the mercurial pill; and often enough to procure three, or four stools a day, especially if the patient is costive.

During this period also, he advises the patient to be kept out of bed, as much as he can bear, and that fresh air may sometimes be let in through an open window; that he should be supported, with proper nourishment, and that the heat, and thirst should be allayed by spirit of vitriol dropt into his drinks: He says, by this means, the opiates, and cordials, which may be wanted in the state of maturation, will be administered with more  
H 4 advantage



#### 104 *New Method of treating the Small Pox.*

advantage and security. It is necessary however to observe that the mercurial pill is prohibited in the bleeding and purple small pox, though a very cold repellent method in the beginning is thought adviseable. It is worthy of remark also, that during the fever of eruption Dr. *Dimsdale* orders his patients daily into the cold air, let *the weather be what it will*, and to be kept *walking* in it for a quarter of an hour, or more, each time; that they are ordered to drink cold water from the pump, notwithstanding the mercurial pill, and purge; and that if they are not able to walk of themselves, they must be supported by assistants; so much he depends on the influence of the cold air, to check the fever, and abate the first intense heat, on which the future event of the patient depends. He thinks bleeding in general unnecessary, the patient being commonly so reduced by the preparatory course, and evacuations, during the fever of eruption, and after, as to render it unnecessary; particular cases may however demand it.

## C H A P. XV.

*Observations on Inoculation, and the treatment of the Small Pox.*

**D**R. *Dimsdale*, in his very ingenuous account of inoculation, very candidly owns, that he has often been obliged to inoculate *without any preparation*, and yet has always had the *same success*; and that he is inclined to think, that much, if not the whole of this process may be dispensed with, except in very full habits, or where other particular circumstances may require it. But in all these cases, from the insertion of the matter, to the time of the eruptive complaints, the patients have been kept to a due observance of diet, and the use of the preparatory medicines proportioned, as well as he could, to their condition: that, in his opinion, the success consists chiefly in the method of inoculating with recent fluid matter, and in the management of the patient at the time of eruption, by the cooling regimen, and gentle physic.

Indeed, as it seems beyond the power of observation, to judge with certainty, of the constitutional dispositions, necessary for conducting inoculation safely; and that the phrases

106 *Observations on Inoculation,*

ses in vogue of *sweetning the humours, correcting, purifying, and cooling the blood*, are destitute of true meaning, or explanation; the less in general the preparation, perhaps the better, especially, if the subject be *in health*: this indeed is the true criterion for the operation; and great caution therefore is necessary, that it be not disturbed by improper preparation; least mischief ensue by this artificial alteration made in the constitution.

By some however, considerable advantages are supposed to arise from the preparation, and a total abstinence from animal food, spirituous, and fermented liquors; (especially, in what are called gross, and replete habits;) with frequent, and *brisk* purging during the preparatory course.

The continuance of purging, at due intervals, after inoculation, even 'till the eruption appears, is thought by others to be extremely advantageous, by removing those humors from the constitution, which might assimilate with, and add fuel to the distemper.

Some there are who inoculate with great success, without any previous preparation, or giving a grain of mercury; depending on the abstemious diet, and *brisk* purging, at proper intervals,



intervals, *after* inoculation is performed. But undoubtedly *brisk* purging should be used with great caution, as there are many habits that may suffer by it; and perhaps it may be the cause, that sometimes there are no pustles; or that the few there are, do not come kindly to matter, by thus subtracting the fluids, which should supply them.

It is much to be doubted, whither the *mercurial* powders have any other effect, than cleansing the bowels of foulness, or worms: for those who have given mercury in the preparatory course, in the old method of inoculation, have not been more successful, than those who give none; and experience has proved, that *mercurial* medicines are not to be depended on, for preventing a bad sort of pox, when the infection is taken in the natural way: on the contrary they have been strongly suspected of fusing, and dissolving the blood, and heightning the malignity of the distemper: there are others however, who think differently.

By some, a kind of specific power is attributed to the following pills, given to adults, every other day, from the fifth after inoculation: they are composed of ten grains of Kermes mineral, twenty of Succotine aloes, and ten of Camphor, made into small pills, with

with spirit of wine. If no preparatory medicines have been used, these may supply their place; and when the punctures do not *properly* inflame, they are by some given more freely. As they operate by stool, they may carry off part of the variolous matter that way, and so lessen the number of pustles, and prevent their confluence; it may be difficult to ascertain any other effects, from their operation.

The medicine called *punch*, and given to abate the fever, when it runs high, is made by boiling a pint of oats, in four pints of water, 'till ready to burst: then strain off, and add three, or four drams of nitre; make it palatable with sugar, lemon juice, or weak spirit of vitriol, to be drank of freely during the fever of eruption.

Instead of the oats, pearl barley may be used: for all drinks of this kind should be grateful to the taste, to prevent the sickness, and reaching, so common in this disorder: they should be drank cool; and with regard to quantity, the calls of nature are the best directory.

As it is universally allowed, that the higher the fever is, the greatest the eruption will be;

be; the business of art, is therefore to check it in time, by endeavouring to mitigate the disorder in its first stage; and as the danger consists in the quantity, the object of treatment ought to be the reducing of it: for this purpose, some think the admission of cool air alone is sufficient, without evacuations; and esteem it the most powerful antidote against this disorder; as the hot air, on the contrary, is the principal cause of the fatal accidents attending it: heat being the most powerful, and universal agent in nature, in propagating vegetation, fermentation, and in general in every process, where one substance is to be converted into another: and as cold checks the growth of a plant, or the fermentation of a body, so it is supposed to retard, or prevent the assimilation of our humors with the variolous matter.

But as it seems difficult to ascertain the different degree of heat, or cold, necessary for this purpose, in different constitutions; perhaps it would be most prudent to avoid the excesses in both: to suffer the patients always to breathe a cool air, and to let their own sensations be the standard of this temperature; and though they may desire such a degree of cold, as would be rather disagreeable in health, it will



will in general be right to indulge it, as it is the voice of nature, which scarce ever errs.

Though the cooling method above mentioned be in general right; yet, there certainly are cases, when, at the time of eruption, the circulation is too languid, and wants to be excited; in order to raise a due degree of fermentation, to separate, and expel the various particles. In such tender habits, no prudent person would purge indiscriminately, or expose his patient to too cold an air, or too cooling a diet; but rather indulge him in a more generous one: how often has a glass of wine, or bit of chicken, answered the end of exciting a due degree of fever, when nature has been deficient in her work, or perhaps made unequal to the task, by too rigorous a preparation.

To prevent deception, or disappointment, however after inoculation; it may be necessary to observe, that no absolute dependance is to be made on the inflammation and hardness round the incisions only, or even a discharge from them; without a fever, or due degree of pustulary eruption, which ought also to mature; as the virus under such circumstance, may otherwise act only locally, and not be received into the  
mass;

mass; and of course not produce the small pox. The Dutchess of *Boufflers*, Lady *Morrice*, and many others inoculated both at *Paris*, and here, are most evident proofs of this assertion; and therefore in all doubtful cases, it would be prudent for the patients security, to inoculate a second time.

It is much to be feared, that an imperfect crisis of the pock, is *often* the consequence, of reducing the patient too low, by purging too frequently, both in the preparation, as well as at the time of the eruptive fever; whereby nature is disturbed in the work of expulsion: and undoubtedly it requires no small degree of physical sagacity, to direct this important process; so that there be neither redundancy, from too much fever, or a scarcity of pustles, from too little; in which latter case, the blood not being properly depurated, the patient has the mortification of finding a second crop, upon recruiting his constitution; or for want of them, some chronic disease, in future.

The exposing the patient also indiscriminately to all weathers, at the time of the eruptive fever, seems a practice too presumptuous; especially

especially as an acquired cold may thereby ensue, and thus create an adventitious disorder: and if the mild air of the summer months, is thought sufficient to moderate the fever at this period; why may not the drinking cold water, and moving about in an airy room in the winter months be, in most cases, sufficient? especially as the air, at this time, within doors, is in many degrees colder, than it is without in the summer; and the necessary degree of coolness, seems to be that of reducing the blood to its natural state: but if this should not be sufficient to lessen the heat of the blood, in *some particular cases*, recourse must be had to the open air, though the season be ever so severe.

It should seem, that about the time of eruption, when the patient is *in bed of nights*, moderate, gentle sweats may be encouraged by drinking of acid drinks, and mild antimonials; if a free spontaneous perspiration does not ensue: and as probably part of the varicellous matter is thus discharged, and carried off, by these moderate sweats thus excited; they must, in many cases, and constitutions, be advantageous.



It may be no unentertaining amusement to some readers, to be informed of the *Indian* method of inoculation, so far as it relates to the cool regimen, so successfully adopted of late in these kingdoms; as it proves this new plan has the sanction of antiquity, and is founded on long, and certain observation, and success.

Inoculation is performed at *Indostan* by the *Bramins*, who are annually delegated for this service. The preparation consists in abstaining for a month from fish, milk, and butter. It is no uncommon thing for them, before they inoculate, to ask the parents how many pocks they chuse their children should have, and, according to Mr. *Holwell*, they hardly ever exceed, or are deficient in the number required: previous to the operation, they rub the part intended for inoculation, for eight, or ten minutes, with a peice of cloth; then with a small instrument they wound, by many slight touches, about the compass of a silver groat; just making the smallest appearance of blood; and apply thereon a pledget of cotton, charged with variolous matter, with which it was saturated the preceeding year; for they never inoculate with fresh matter, or what is taken from the natural pock.

114 *Observations on Inoculation, &c.*

In the morning after inoculation, four collons, or eight gallons of cold water, are ordered to be thrown over the patient, from the head downwards, and to be repeated every morning, and evening, until the fever comes on; then to desist, 'till the appearance of the eruptions; when the cold bathing is pursued, through the whole course of the disease, 'till the scabs drop off.

Confinement to the house is absolutely forbid, and the inoculated are ordered to be exposed to every air that blows; and the utmost indulgence they are allowed, when the fever comes on, is to be laid on a mat at the door: their regimen is ordered to consist of all the refrigerating things the climate, and season produces; as plantanes, sugar canes, water-melons, rice gruel, made with white poppy seeds; and cold water, or thin gruel for their ordinary drink.

When the pustles sink, and the patients seem to be in eminent danger, the cold bathing is renewed, which never fails of filling the pock, as it were by enchantment: this method must appear strange to us, and though not adapted to *European* constitutions, may suit the relaxed habits of *Indians*; and justify in some measure, such a cooling method,  
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under proper limitations, as may suit our variable climate.



C H A P. XVI.

*Of the Apoplexy.*

**T**H E apoplexy is a total abolition, or loss of all sense, and voluntary motion, except that of respiration; attended with a strong pulse, laborious breathing, and a deep sleep, with starting, and sometimes foaming, or froth about the mouth.

This disease is usually divided into two kinds, the sanguineous, and serous apoplexy. The former arises from a compression of the brain, from an overfulness of blood, or a rupture of a blood vessel, effusing its contents into the cranium. The latter is owing to a collection of humours, or water, in the ventricles of the brain: the former is peculiar to those who abound with rich blood, of too dense a consistence; the latter invades those of a less robust constitution; whose blood is more watery, who are in a more relaxed state, and who abound more in other humours, than in red blood.



The cure of the sanguineous apoplexy is to be attempted, by diminishing the quantity, and density of the blood, and fluids, by large bleedings, cooling purges, and evacuations by glysters, neutral salts, and plenty of diluting liquors with nitre : In short, it should be treated at first as a plethora, or præternatural fullness of the vessels ; and after copious evacuations, the volatile salts, and blisters to the extremities, are to be used to advantage.

The patient should lose from twelve, to twenty ounces of blood, from the arm, feet, or jugular ; which operation should be repeated again, and again, within the space of a few hours, if the pulse, and symptoms require it. Cupping glasses to the head, and neck, are thought of use, either with, or without scarification, and opening the temporal artery is directed by some.

The speediest way of procuring stools, is by glysters, if they can conveniently be administered : for this purpose, if a medicinal one is not procurable, let half a pint, or more of water gruel be thrown up, with four spoonfuls of oil, and a large spoonful of salt ; in which also a quarter of an ounce of tobacco may be boiled ; and this may be repeated every three hours, if stools can no otherways be procured. If

If the patient can be made to swallow, pour down by degrees, three ounces of infusion of fenna, quickened with half an ounce of tincture of jalap, and salts ; or any other cooling purge, and apply a blister to the neck : if the physic cannot be got down, sharp, irritating glysters should be thrown up, prepared with the common decoction, two ounces of syrup of buckthorn, and turbid antimonial wine, and half an ounce of the purging salts : or instead of the syrup, a dram of the purging extract, or an ounce of tincture of jalap, may be added.

If the patient recovers from the fit, nitre, and the neutral salts should be given freely, to cool, and attenuate the blood, interposing gentle purges from time, to time ; and to prevent a relapse, an abstemious, thin diet should be strictly enjoined ; with a perpetual blister, or seton in the neck, or interscapular issues, with frequent bleeding.

During the fit, and for some time after, the head should be kept cool, and placed high, with the legs hanging down and immersed in warm water : the patient should be moved as little as possible ; in a word every thing must be avoided that contributes to force the blood up into the brain. Vomits therefore, and stimulating applications to the

nose must be pernicious, in this sanguine apoplexy from fulness.

The pituitous, or watery apoplexy, which chiefly affects those of a cold, and phlegmatic constitution, requires a very different treatment. Bleeding must be sparingly used, except in the fit; the intention of cure being to attenuate the viscid, heavy fluids, promote the absorption of the water, in the ventricles of the brain, and expelling it the body. Aromatic, warm, stimulating medicines are necessary afterwards, to mend the blood, and strengthen the constitution.

These views are to be obtained, at first by stimulating glysters, and brisk purges; by blisters to the back, thighs, and legs, and lastly, to the head: by stimulating poultices to the feet, and such kind of medicines to the nose; finally by vomits, issues, setons, &c. to prevent a relapse, and drive the humours from the brain.

To correct, and give a brisk circulation to the blood; volatiles, and other warm medicines must be freely taken, as valerian, mustard seed, winters bark, horse-radish, either given in substance, or strong infusion: for this purpose, the gum pills with cinnabar may be directed,



directed, with a warm purge between whites. The body should never be costive, but kept open by *Ruffus* pill, or hiera picra wine, and the diet should be generous.



C H A P. XVII.

*Of Paralyfis, or Palsy.*

**T**H E palsy is a privation of voluntary motion, or sense of feeling, or of both together, in one or more parts of the body. Paralytic complaints are usually distinguished into two kinds: The hemiplegia, or general palsy, in which one whole side is affected; and the partial palsy, in which only a particular part, organ, or member is affected.

The cause of an hemiplegia, or palsy on one side, is a compression of the nerves at their origin, in the brain, or spinal marrow; hence, it is often the consequence of a preceeding apoplexy.

The partial palsy is also owing to some compression, or injury done to the nerves of any particular part, or to some disease of its coats: this disorder is frequently produced by mineral exhalations of antimony, mercury, ar-

fenic, lead, &c. the cure therefore must vary, and be attempted from the original cause.

When a palsy succeeds an apoplexy, it is seldom cured, but must be treated with the remedies advised for that disease: those of the warm, nervous, stimulating class, with blisters, are usually directed; and the parts affected may be rubbed with oil of amber, camphor, and volatile spirits; and pultices of mustard seed, and horse-radish, with, or without oat-meal, must be applied on them.

The internals may be valerian, and volatile salts, castor, &c. and a strong infusion of mustard seed, horse-radish, and winters bark in good mountain wine, *viz.* an ounce of each of the former, with half an ounce of the latter, infused for two or three days in a quart; a wine glass of which may be taken twice, or thrice a day, with forty drops of tincture of guaicum, or the antimonial wine.

Warm stomachic purges, as hiera picra wine will be necessary to keep the body open. But *Bath* waters are in general found the most successful remedies.—The electrical shock has often been found serviceable. When the palsy arises from minerals. *Vide* Chap. On dry belly ach.

## *The Vertigo, or Giddyness.* 121

As a numbness, and loss of the use of limbs, arise sometimes from being exposed to inclement seasons, the best method of treating such cases, is by giving plenty of mild, diluting liquors, as white wine, or mustard whey, with mindererus spirit, or a few grains of camphor. *Ward's*, or *Dovar's* sweating powder might be useful on such occasions; and if the symptoms are not removed by these means, the method above recommended, should be put in practice.



### *The Vertigo, or Giddyness.*

**T**HIS disorder is a giddyness of the head, attended with a dimness of sight, and fear of falling.

As it may arise from different causes, so the indications of cure must vary. The brain may be originally affected by too great fulness of blood, in young, and sanguine habits; and in phlegmatic, cold constitutions, it may be owing to watery accumulations in the brain, or its ventricles; sometimes it may be occasioned by consent of parts, from some fault in the stomach; at others, from some evacuation



ation suppressed, or eruption repelled ; in others, it may be owing to the gout.

In the former case, bleeding, and cupping are necessary, with purging, and general evacuations. In the phlegmatic, blisters, issues, setons, warm purges, and attenuating medicines ; to draw off the serum, to mend the blood, and juices, and to strengthen the constitution : air, and exercise, are also essential requisites.

When the stomach is the cause, vomits, and warm purges, with bitters, are the most proper ; or *Ruffus's* pill may be taken in small quantities : when from the gout, bathe the feet in warm water, and apply mustard poultices : natural evacuations must be restored, and eruptions pushed out to the surface.

To strengthen the nerves, and invigorate the habit in general, valerian must be taken in large quantities, or the bark may be joined with it. Warm aromatics with steel, will also be useful for this purpose ; and in some cases the gum pills alone, or joined with cinnabar, or camphor, are more successful : to warm, and attenuate the blood, a spoonful of mustard seed may be swallowed night, and morning ; or three, or four spoonfuls, of the aromatic wine, in the preceeding Chapter, may be taken thrice a day.

C H A P.



## C H A P. XVIII.

*Of the Epilepsy, or falling Sickness.*

**T**HIS disease takes its name, from the sudden falling of the patient to the ground; the thumbs are shut up close to the palms of the hands, the eyes are distorted, and inverted, so as nothing but the whites appear; all sensation is suspended, insomuch that by no smell, noise, nor even by pinching, the body, can they be brought to themselves; they froth at the mouth with a hissing kind of noise; the tongue is often bit by the teeth; and sometimes the limbs are stiff, and the patient is immoveable as a statue: the fits return on certain days, or hours, but especially about the new, or full moon; and often from fright, anger, sudden joy, or any unexpected perturbation of mind.

This disease owes its origin to so many different causes, that it is extremely difficult of cure; and the same remedy which succeeds in one case, often fails in another: we find indeed from daily experience, as well as from examining the records of medicine, that the

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124 *The Epilepsy, or falling Sickness.*

cures that have been made, have mostly been performed either by change of air, such as going from a cold into hot climate; by some remarkable change of life, or some accidental disorder; or by issues or drains; or by the removal of some acrid or irritating substance: in short, that those medicines called specifics, have in general had but little share in the cure.

After proper evacuations however, by bleeding, vomits, and physic; the principle ones to be depended on, are the bark, and fresh valerian, taken to the quantity of a dram, twice a day for three months, with the cold bath and exercise; and then to be repeated three or four days before the new, and full moon. The Cardamine, or Lady's smock has often been given to advantage, to the quantity of a dram, three, or four times in a day: musk and cinnabar, are extolled by many; from ten, to twenty grains of which, may be taken morning, and night, for some weeks continuance.

The fit however is said to be prevented, by stretching the jaws to the utmost by means of any peice of metal, or strong body introduced between the teeth: this should be done as soon as the patient perceives the approach.

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*The Epilepsy, or falling Sicknefs.* 125

ing symptoms, or as early as possible, when the fit is come on, before the jaws are locked: a five shilling peice might answer this purpose; but a square peice of iron, or steel, of such demensions, as to be adapted to the widest distension of the jaws, and fitted to a handle, might be more proper: as this application has been attended with success, and is easily put in practice, it is certainly worth trial.

When the valerian is given alone, care should be taken that it is fresh, and pungent on the tongue, on chewing; and it should be taken to the quantity of two, or three drams in a day, for some weeks, to answer the intended purpose: when it cannot be taken in substance, a strong tea, or infusion may be made of it, by pouring boiling water on the root bruised, and proportioning the strength, to the patients stomach: the following tincture will best suit some delicate habits.

Bruise four ounces of good valerian root, and pour on it a quart of mountain wine; cork it up, and let it stand a fortnight, or three weeks, shaking it every day. Decant the clear liquor, or filter the whole through paper,

126 *The Epilepsy, or falling Sickness.*

paper; a large spoonful or two, may be taken twice a day, in a glass of water.

As to the milletoe, which was once so strongly recommended in this disorder, it is now esteemed a trifling remedy, and not to be depended on. Where sea bathing is thought necessary, by way of strengthening the nervous system, and can't conveniently be got at; its place may be supplied by immersing the patient in a proper tub of cold water, to every gallon of which, half a pound of salt may be added.

In all disorders affecting the head, great attention should be paid to the stomach; which being loaded with viscid, or bilious matter; frequently contributes thereto. When this is the case, medicines are in vain directed, till the stomach has been properly cleansed by repeated vomits; and afterwards strengthened with elixir of vitriol drops, and the hiera picra tincture, taken twice a week, to the quantity of four, or six spoonfuls.

Issues have been successfully used in some cases, made on the head between the futures; on the nape of the neck, and between the shoulders;

shoulders; particularly in full, scorbutic habits; especially where some humours are supposed to have fallen on, or affected the nerves.

In some nervous disorder, attended with dimness of sight, the valerian root coarsly powdered, and mixed with rappee snuff, has been thus taken to advantage, and is worth trial in most disorders of the head.

Three, or four small asa-fætida, or gum pills, are often successfully given for several nights going to bed; and on particular emergencies, the following foot drops may be taken to the quantity of a tea spoonful, in a glass of water.

To a quart of brandy, put two ounces of assa-fætida sliced thin, and three ounces of wood foot broken to peices. Shake the bottle every day for a fortnight, and then decant the clear tincture. Electrification has sometimes been serviceable.

To strengthen the habit, and prevent a relapse; the bark, with steel medicines, cold bathing, and exercise, are chiefly to be depended on.





## C H A P. XIX.

*Chorea Sancti Viti ; or St. Vitus's Dance.*

**T**HIS is a kind of paralytic disorder, which boys and girls are subject to, about the age of ten years, to the time of puberty. It discovers itself by a kind of lameness, or an instability of one leg, which they draw after them in a ridiculous manner, nor can they hold the arm of the same side still for a moment ; for if they lay it on their breast, or any other part of the body, it is presently forced away from thence by a convulsive kind of motion, whither they will or no. If they are desirous of drinking, before they can bring the cup to the mouth, they use a thousand odd gesticulations, for they cannot bring their hand in a direct line to their mouth, but it is forced this way, or that, 'till at length if they have the good fortune to hit the mark, they throw the liquor down their throat greedily, as if they designed to raise laughter in the spectators.

In order to the cure of this complaint, it is in general, necessary to take away some blood,

blood, and give purging physic for three, or four times: *steel medicines, the bark, and cold bath*, generally effect the cure afterwards, in a few weeks: these medicines may be given in various forms, adapted to the humour of the patient. *Vide N°. xvi. and xx.*

A proper attention should be paid to the symptoms, that they proceed not from worms; which are sometimes observed to produce a train of very extraordinary symptoms. In such case, the cure depends on their being destroyed, and expelled out of the body by the usual worm medicines; as powdered tin, æthiops, or wormseed. To a child ten years old, fifteen grains of bark may be taken twice a day; or an ounce of the decoction; a tea spoonful of steel wine may also be taken thrice a day, by way of strengthner.



## C H A P. XX.

*The Phrenitis, or Phrenzy.*

**A** Phrenzy is a continued delirium, attended with an acute fever, quick pulse, and strong respiration.

An extream heat, and a violent inflammatory head-ach, commonly precede this disorder

der: the eyes and face are red; the patients, when asked questions, answer with ferocity, and they pluck the knap of their cover-lids, or bed cloaths.

The most frequent causes of this distemper are, the violent heat of the sun, to which in harvest time, the peasant is exposed; excess in wine, brandy, or spirituous liquors, and extreme emotions of anger.

A phrenzy is very dangerous, and often occasions sudden death; for it is a true inflammation of the membranes of the brain, and sometimes even of the brain itself.

Bleeding here is essentially necessary: it should be large, and chiefly in the foot: if the fever, and heat continue, it must be repeated; and it will be right, after the first bleeding of the foot, to open one of the jugulars: the bleedings must be repeated, 'till the extream heat, and the violence of the delirium are abated, and gentle cooling physic should be given, as in other inflammatory cases.

A scruple, or half a dram of nitre should be taken every three hours, in barley water, baum tea, or the emulsion N<sup>o</sup>. iv, and a glyster may be given night, and morning,  
when



when the opening physic is not taken; prepared with ten, or twelve ounces of mallow decoction, in which a dram or two of nitre is dissolved, with two spoonfuls of honey and vinegar.

It will be proper to shave, and even to blister the patients head, after bleeding, and evacuations have been unsuccessfully tried; and a compress dipped in vinegar, and water, may frequently be applied over his forehead and temples: the air of the bed chamber should be cool, and temperate, and he ought to be kept sitting upright in his bed, with his head raised as much as possible; it would be also proper to make him rise twice a day, to set him in an arm chair, and bathe his feet in warm water. After the night bathing, a poultice of horse-radish and mustard seed, or equal parts of the latter and linseed meal, beat up with a little common salt, and vinegar, should be applied to the soles of the feet, and continued on 'till morning; or blisters may be applied to the legs.

During the whole time of the illness, he must be confined to plain barley water, or water gruel; no broths should be given, and anodine medicines should be carefully avoided;

Notwithstanding the diminution of the symptoms, the delirium sometimes does not entirely give way ; but it commonly decreases insensibly, on the patient sitting upright several times a day, in an arm chair.



C H A P. XXII.

*The Cephalalgia, or Head Ach.*

**T**HE head ach arises from so many different causes, that it would take up too much time to distinguish them in this place: we shall only observe, that the seat of the head ach, may be in the contents within side the skull; or it may be external, in the membranes covering it; or in the bone itself.

As the causes also are various, so must the relief be differently attempted. Thus when pains

### *The Cephalalgia, or Head Ach.* 133

pains of the head arise from fulness, or a suppression of any accustomed secretion, or evacuation, bleeding is the prime remedy, with gentle evacuations. When it arises from a rheumatic cause, or cold settled on the membranes, blisters are generally of great service, by drawing off the impure serum, or the retained perspirable matter; with the anti-rheumatic medicines directed, in the Chapter on that disorder.

When the pain is periodical, and returns at stated times, it must be treated with the bark; and the method be pursued, which we have laid down, in treating intermitting fevers.

When it arises from a venereal taint, the pain then being chiefly in the night, mercurial medicines, and diet drinks are principally to be relied on.

When the pain arises from a nervous affection, and is confined to a particular spot, it must be treated with nervous remedies; a blister applied on the part, or near it, often gives speedy relief: *Æther*, *Ward's essence*, horse-radish, mustard seed, ginger, and such others, as are of an active, stimulating quality,



134 *The Cephalalgia, or Head Ach.*

will frequently produce the same effect: but as these are only temporary reliefs, the constitution in general should be invigorated by air, and exercise; preparations of the bark, or the valerian in substance, tincture, or infusion; joined with the gum pills, asa-foetida &c. and steel.

As there is a very extraordinary communication, and sympathy, between the head, and stomach; the pains in the former, frequently arise from impurities in the latter; where bilious, or other putrid juices, by their irritation of the nerves, occasion the above sensation.

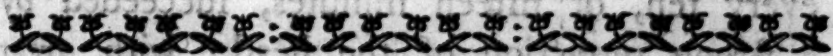
In such case, vomits become absolutely necessary, with gentle stomach purges, such as *Ruffus's* pill, *hiera picra* tincture, or the aloe-tic wine: these given intermediately, with bitters, or strong chamomile tea, bid fairest to remove head aches from this cause.

In some nervous cases, the electrical stroke has been found useful; as have warm plasters, and embrocations to the temples: thus mastic, *tacamahac*, with a little *Burgundy* pitch, and camphor, spread on black silk, may be applied to them; or they may be bathed with the volatile, or soap liniment; camphorated spirit of wine, or hungary water; to which a  
fourth

fourth part of liquid laudanum may be added, when the pain is unsufferable.

To the pained part also, the following warm plaster, may be applied, which is a proper application for most fixt pains. To an ounce of the gum plaster of the shops, add a dram and a half of blistering plaster, and one dram of euphorbium in powder, let it be spread thick on leather.

When pains of the head are very violent, they are sometimes best relieved by fomenting the part with a decoction of poppy heads, and chamomile flowers; or other aromatic herbs. Bleeding with leaches, cupping with scarification, and bathing the feet in warm water, are often found effectual for this purpose.



C H A P. XXIII.

*Of Catalepsy, Tetanus, Opisthotonus, and Emprosthotonus.*

**A**MONG all the nervous, or spasmodic disorders, there is none more surprising than the catalepsy. In this the patient becomes either wholly, or in a great measure, insen-

136 *Catalepsy, Tetanus, Opisthotonus,*

sible of what is about him, and remains exactly in the same posture, in which he was first seized. His joints are sometimes so stiff, that they are scarce to be bent; or, if they are, they remain in whatever situation they are placed; the pulse is often low, and irregular.

The opisthotonus, is a general rigidity of particular muscles: the first appearances are often mistaken for a crick in the neck, being attended with an uneasy stiffness, and pain of that part, and about the shoulders; which gradually increasing, the head can by no means be bent forward, or sideways, without turning the whole body.

After three, or four days, spasms under the sternum come on, and return more violent every ten, or fifteen minutes, succeeded by a strong retraction of the head; with great rigidity, and pain round the neck, and along the spine, to the lower extremities, which are suddenly stretched: all the muscles of mastication, and deglutition, and the deltoid, and pectorals, are violently contracted; so that the shoulders are strongly raised forwards, and the arms are stretched out, or drawn across the body; in fine, the posterior muscles of the back,



back, so overcome their antagonists, that the spine is strongly bent backwards, and forms a hollow arch, so that the patient rests entirely on the hind part of his head, and his heels.

In the tetanus, the general symptoms are the same, except that from the first attack, the lateral, abdominal, and other anterior muscles, are equally contracted with the posterior ones; and the arms become rigid, as well as the lower extremities: the patient swallows more free in this, than in the other; the head and spine is recurvated, tho' not quite so much as in the opisthotonus.

In the emprosthotonus the anterior muscles of the neck, and body, are so spasmodically affected, as to draw the head down to the breast, and to bend the spine strongly forward.

The cause of these violent spasmodic contractions, are perhaps inscrutable; and will continue so 'till we are better acquainted with the structure of the brain, and nerves; points, which will, probably, for ever elude our researches. All we know, is, that whatever irritates, or disagreeably affects the brain, nerves, or any of the more sensible parts, occasions continued spasms, or convulsive motions; either  
in

138 *Catalepsy, Tetanus, Opisthotonus,*

in the parts themselves, or in those, with which they have any considerable sympathy; and that, when the nervous system is delicate, or the irritation great, almost the whole muscles will be sometimes agitated with alternate contractions, or affected with a tetanus, or general rigidity.

The cure depends principally on warm baths, and opiates, a bleeding being premised, to deplete the vessels: while the patient is in the water, gentle friction should be used, especially about the neck, breast, and along the spine; and he is to be kept in the bath, until the pulse becomes soft, and full: when he is taken out of it, he must be wrapt immediately in a dry blanket, without wiping, where he should be suffered to sweat moderately.

If the symptoms are not relieved, opiates must be repeated boldly, both as to time, and quantity; and the cessation of the spasms, or remission of the contractions, must be the directory; and let it be observed, that to suppress them, much larger doses of opium are necessary, than perhaps in any other disease, except the lockt jaw, which is of a similar nature.

Besides

Besides opiates and the warm bath, emollient glysters with a large proportion of oil, should frequently be injected; not only to empty the guts, but as an internal fomentation, to relax the constrictions of the viscera.

In the tetanus the same method should be used, and the belly be frequently fomented with flannels squeezed out of an emollient fomentation.

There are some milder species of these spasmodic disorders, that will submit to the usual antispasmodics; as camphor, castor, valerian, asa-foetida, and musk; particularly this latter, given in large quantities, viz. half a dram every four, or six hours, has succeeded, when all the others have failed. Some advise blisters to the spine of the back, and bathing with oil of amber.

We shall conclude this Chapter with observing, that such medicines as are found by experience to be useful in spasms, and alternate convulsions of the muscles, seem to produce their good effects, by that stimulus which they communicate to the nerves; especially those of the stomach, and intestines; whose large plexus's, and ramifications, are very considerable; and have a remarkable sympathy with almost every part of the body.

We



140 *Catalepsy, Tetanus, Opisthotonus, &c.*

We frequently see, that a dram of brandy, by stimulating the nerves of the stomach, before it can have passed into the blood, will almost instantly lessen a tremor of the hands; why then may we not account for the action of other stimulating medicines in a similar manner, in controuling spasms, and other convulsive motions, how remote soever from this organ?

The influence of the stomach in the animal œconomy, is greater perhaps, than is generally imagined; as the whole system is either invigorated, or affected with a languor, according to the different disposition of its nerves. And it is the opinion of a very ingenious modern, that in the cure of chronic complaints, however distant their seat may be from the stomach; those will have the greatest success, who attentively consider the present state of this organ; and that much the greatest part of these distempers seem to have been removed, rather in consequence of the medicines given, having had a certain effect on the stomach, and thereby enabling nature to do her own business; than by any specific operations on the particular seat of the distemper.

C H A P.

## CH A P. XXIV.

### *Of Nervous complaints in general.*

**T**H E R E are no distempers which assume such a variety of forms, as those called nervous; and there are few complaints which they do not resemble, or mimick. In women they pass under the denomination of hysterics. In men hypocondriac, low spiritness, melancholy, hip, spleen, &c.

These disorders in general, are occasioned by a relaxation of the nervous system; and their relief depends on strengthening the habit in general.

This is chiefly effected by exercise, and cold bathing: gentle pukes; warm stomach purges; the bark, and its different preparation; and steel medicines.

To relieve, and palliate the most urgent symptoms, the gum pills, with camphor, or steel, are the most proper; to which warm aromatic bitter wines may be added, in order to fortify, and strengthen the stomach; that good wholesome chyle may be sent into the blood.

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142 *Nervous complaints in general.*

In flatulent, and spasmodic affections of the stomach, a tea spoonful of castor, or asa-foetida tincture, will frequently give relief; and in hysteric colics, a dram of asa-foetida dissolved in a common laxative glyster, will produce the same effect: when the stomach is much inflated, a tea spoonful of æther given in two large spoonfuls of water, will often throw off the wind surprisingly: but twenty, or thirty drops of liquid laudanum, given in pepper mint water, with a little tincture of castor, and sweet spirit of nitre, are frequently the best expellers of wind, by relaxing the spasms, which are the cause of its confinement.

The following preparation of the bark with bitters, will be found an excellent stomach medicine; infuse four ounces of powdered bark, with an ounce and a half of gentian, and orange peel in two quarts of brandy, in a sand heat for six days, then strain off; and take one large spoonful in four, or five spoonfuls of water, every morning fasting, and in the evening between meals.

Great attention should be paid to a light, easy diet, air, and due exercise; tea in general is found to be pernicious to those of tender, and delicate nerves.



## C H A P. XXV.

*The inflamed sore Throat, and Quinsey.*

**T**H E R E are different species of this disorder: the most common is attended with an inflammation of one, or both tonsils, the palate, and arch of the mouth: the parts are swelled, and enlarged, look red, become painful, and the patient swallows with difficulty; the pain sometimes extending to the internal part of the ear of the diseased side, and is attended generally with more or less fever.

In the true *Angina*, or *Quinsey*, the inflammation not only seizes the above parts, but extends to the wind-pipe, and basis of the tongue: the neck, and throat, is also swelled externally; the difficulty both in respiration, and swallowing, hourly increases; the voice becomes sharpened, and the patients anxiety is great, from the approaching suffocation, and an impossibility to swallow. These symptoms are usually preceded by shiverings, fever, hard, full pulse, and high coloured urine.—The putrid,

144 *The inflamed sore Throat, and Quinsey.*

trid, or malignant sore throat, will be treated of seperately in the next Chapter.

In the common sore throat, bleeding is the prime remedy, to abate the inflammation, and prevent the formation of matter ; and should be repeated, according to the urgency of symptoms, fever, and fulness of pulse : when the patient will submit to it, the tonsils may be scarified ; by which means, the tension of the vessels will be abated, and the swelling instantly lessened, by the discharge of blood from the incisions ; which may be promoted by gargling with warm water.

After bleeding, a cooling purge should be given, or an ounce, or more of manna, and salts, and this may be repeated every, or every other day : the inflamed parts should be frequently gargled with vinegar, water, and honey ; for this purpose, the pectoral decoction, or one of figs boiled in milk, to a pint of which, half an ounce of spirit of sal armoniac ; or a dram of the crude salt may be added ; and frequently used : these are intended to promote the secretion of the glands of the throat, and mouth ; which acids are thought by some to prevent.

For this purpose also, a scruple of nitre, or cream of tartar and sugar, may be suffered

*The inflamed sore Throat, and Quinsey.* 145

to dissolve gradually in the mouth, three, or four times in a day, or be added to the gargles. The steam of hot water and vinegar, received into the mouth, by means of a funnel, is often found to be an effectual remedy; and may be frequently repeated, in order to repel, or disperse the inflammation; for which purpose also black currant jelly may be used.

If the throat be swelled externally, soft flannels moistened with equal parts of spirit of hartshorn, and sweet oil, may be applied every four hours; or sal volatile be sprinkled on the same. When both tonsils are swelled, a blister to the back is remarkably useful, or two blisters behind the ears, extending low down to the jaws; and a small spoonful of mucilage of quince seeds, and syrup of raspberries, may be often swallowed.

The blood should be cooled, and diluted with plenty of nitre, dissolved in gruel, or barley water; two, or three drams to a quart, and be drank of freely; and when the inflammation is abated, astringent gargles may be used, to contract the relaxed parts; such as tincture of roses, sharpened with spirit of vitriol, to which a little honey may be added.

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If



146 *The inflamed sore Throat, and Quinsey.*

If by these means the inflammation, and swelling do not abate, but increase, with shiverings, and throbbing pains, extending up to the ear, of the side affected; a gathering of matter, or suppuration, will ensue: this may be promoted, by holding frequently in the mouth, warm barley water, or linseed tea; and when the swelling becomes soft, should be pierced by a lancet, if it bursts not of itself: the part may be gargled afterwards with barley water, and honey, to which a little tincture of myrrh may be added; and when gargling is not complied with, the remedy may be conveyed to the parts, by means of a syringe.

In the true quinsey, when the inflammation runs rapidly on, and the breathing begins to be affected, the most efficacious remedies should be applied with the utmost expedition; besides plentiful, and repeated bleedings in the arm, and foot; and cupping glasses applied to the neck, and shoulders; scarifications both within, and without, must sometimes be *boldly practiced*, or the patient will be lost. The parts externally should be well fomented, and covered with emollient pultices of bread and milk, and linseed meal; internally the vapour of vinegar and water, or vinegar alone, may be frequently, and for some time, be received into the

*The Putrid, Malignant sore Throat.* 147

the throat; and glisters with nitre should be injected every four hours, to which may be added, when swallowing is entirely stop'd, two, or three drams of starch; or a pint of good broth, to support the patient. Blisters must be applied to the throat, and back; the feet be immersed in warm water: and every thing done, that can derive the blood and fluids from the throat. The last remedy, when the patient is in danger of suffocation, is making an aperture into the wind-pipe, which is an operation readily performed by a dextrous surgeon: through this opening, respiration may be carried on, 'till the inflammation is intirely removed.

That remarkable swelling on the fore part of the neck, and throat, unattended with inflammation, and called Bronchocele, must be treated as a scrophulous disorder; for particulars, see Chapter on the evil, &c.



C H A P. XXVI.

*The Putrid, Malignant sore Throat.*

**T**HIS disorder usually comes on with shivering, and chilness, and is succeeded by a heat, which becomes constant, and intense; the patient complains of pain in his  
L 2 head,

148 *The Putrid, Malignant sore Throat.*

head, and of heat, and soreness in the throat; on the inspection of which, the palate, and tonsils, with the arch of the mouth appears swelled, and of a florid red colour. Instead of this redness, sometimes spots of an irregular figure appear, of a pale, white, or brown colour, surrounded with a florid red: an efflorescence, or rashy appearance, of a crimson hue, is frequently seen on the neck, breast, hands, and fingers: the parotid glands swell, and are painful to the touch; the pulse is quick, and small, sometimes soft and full, the urine pale, and crude: when the distemper is slight, superficial ulcerations appear on the tonsils, and throat; but when bad, deep sloughs are formed of a very offensive smell.

On account of the lowness of the pulse, bleeding is in general prohibited; but there are complicated cases, in some full habits, where it is absolutely necessary; as the pulse most evidently shews: nitrous medicines are also in general condemned, but where inflammatory symptoms prevail, they may be given with safety, and advantage. The more general treatment however at first, is by warm perspiratives; the fever powder, with a few grains of saffron and castor; or the saline draughts, prepared with salt of hartshorn, are usually directed at first;



first afterwards the bark with mindererus spirit.

Blisters to the back, and to the neck, from below the ears to the collar bone, are applied with success: the ulcers in the throat, may at first be gently rubbed with honey of roses, sharpened with spirit of sea salt; to which, if the putrefaction be great, may be added a little Ægyptiacum, and tincture of myrrh. But above all, let the hot steam of a boiling mixture of vinegar, myrrh, and honey, be often received into the throat, through an inverted funnel: to make it more penetrating, some spiritus mindereri may be added: this steam can scarce be used too frequently; is more efficacious than any gargarisms, and medicates the air of the room at the same time: a decoction of aromatic herbs with camphor, myrrh, and vinegar, will be equally efficacious; and may occasionally be conveyed to the parts by means of a syringe.

If the putrefaction gains ground, the parts should be scarified, and kept clean by syringing, or otherwise; which, with the vapour, should frequently be made use of: the fever is to be treated, as of the putrid kind, with the decoction of the bark, and mindererus spirit: which should be given early, if the putrid symptoms are threatening.

150 *The Putrid, Malignant fore Throat.*

Gargarisms may be prepared with tincture of roses, and its honey, with a little tincture of myrrh; or with the pectoral drink, warmed with a little contrayerva root, to which may be added, a fourth part of vinegar, and a little of the above tincture; but they are best applied by a syringe, if the ulcers are very foul.

If the patient be faint, and low, add the cordial confection to the bark draughts; if a purging ensues, add a proper quantity of dialcordium to them; with a spoonful, or two of a mixture of the same intermediately. for if the purging is not controuled, the patient will soon sink.

If the putrefaction be great, a few grains of extract of myrrh may be added, or the myrrh it self ground with sugar; or a decoction may be made, by boiling three drams, in nine ounces of water to six; of which, from two drams, to half an ounce, may be taken at a time: these, with the bark, are principally to be relied on, in order to subdue the putrid state of the blood, and juices.

In the last stage of this distemper, the patient must be supported by cordials, and a nourishing diet, but for a more particular treatment, consult the Chapter on putrid fever.

Before

*The Putrid, Malignant sore Throat.* 151

Before we quit this subject of sore throats, it may be necessary to observe, that there are many inflammatory cases, where it would be dangerous to wait, 'till the matter had burst through the swelling of it self, without risking the suffocation of the patient; especially when seated at the root of the tongue. On these pressing emergencies, when rigors, and shiverings preceeded by throbbing pains, have denoted the formation of matter; after depressing the tongue, the swelling must boldly be cut into, by a proper curved knife, and sometimes the incision must be made deep, in order to enter the cavity, wherein the matter is lodged.

After cupping glasses, and poultices have been externally applied, in hopes of deriving the inflammation to the outward parts; and repeated evacuations have been in vain attempted to disperse the inflammation; when notwithstanding every means used for this purpose, the fever continues, with pulsative pains in the part, and cold shiverings throughout the body; bleedings, and evacuations become then useless; as matter is now formed, and nothing but the knife, can save the patient from the danger of being suffocated by the swelling; or from perishing from the sudden rupture of it, and the matter issuing into the

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windpipe.



windpipe. It certainly requires no small degree of chirurgical skill, to conduct such an operation; but an accurate examination of the parts with the fore finger, where the fulness is most distinguished, and softness most manifest, will be the best directory for the knife; which should it fail to penetrate the cavity, will be attended with this advantage, that the discharge of blood will deplete the vessels, and so lessen the swelling, as to facilitate respiration, now in the utmost danger of being totally impeded. So that on such occasions, scarifications must be boldly put in practice, or the patient will be lost.

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## C H A P. XXVII.

### *The Optthalmia, or inflamed Eye.*

**T**HE eye is said to be inflamed, when the white part acquires a red colour, from the red blood being forced into vessels, where the lymph, or watery part of the blood only, used to circulate: it is frequently attended with great heat, pain, and pricking; the lid is swelled, and there is often a discharge of a sharp serum.

A recent

*Optthalmia, or inflamed Eye.* 153

A recent inflammation of the eye is to be removed by evacuations; by bleeding, cupping, stools, and blisters; with cooling nitrous medicines, and anodine fomentations: and when the inflammation is abated, and a relaxation of the vessels only remains, restringent collyriums will be highly useful, to contract, and brace them up.

The cure therefore should be begun, by bleeding in the arm, and taking daily, or every other day, a cooling purge, or an ounce of manna, and salts; and if two, or three drams of nitre were taken daily in barley water, the inflammation would be sooner removed; especially if heat, or any feverish symptoms attend: if the feet likewise were bathed every night in warm water, it would be found serviceable.

To remove the pains in the ball of the eye, which are sometimes very great; emollient, and anodine fomentations are extremely useful, to relax the vessels, and abate their tension: for this purpose, flannels may be applied for some time, wrung out of milk and water; or a decoction of elder flowers, and poppy heads, to which a fifth part of vinegar may be added: the eyelid may be kept constantly moist with fine raggs wetted therein, and if the pain is not abated thereby, a soft poultice

154 *Optthalmia, or inflamed Eye.*

rice of bread and milk, or linseed meal, should be laid over it: if the pain should be still acute, draw off more blood, drop into the eye, a little mucilage of quince seed, and liquid laudanum, and give an internal opiate, at going to bed. Or, to the above decoction, with which the eye lid is kept moistened, may be added a few grains of opium, or thebaic tincture.

The more violent inflammations, are not to be cured without large bleedings, unless we can make derivations from the affected part, by blisters behind the ears, or back, and keep the sores running. But it is worth observation, that bleeding by leeches is often very efficacious; two of which may be applied daily to the lower part of the orbit, or near the external angle of the eye; and when they are removed, the orifices may be kept oozing for some time, by dabbing them with a sponge dipt in warm water.

When the inflammation is recent, or has yielded a little to evacuations, the coagulum aluminosum, or white of an egg beat up into a curd with alum, may be applied on lint, or between two pieces of fine linnen, over the eye lid; and the pulp of apple, boiled, roasted, or rotten, may be used for the same purpose, on going to bed.

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In the day time, the eye may be frequently dabbed, and kept moist, by a solution of sugar of lead, or white vitriol; twenty grains of the former, and ten, or fifteen of the latter, dissolved in three, or four ounces of water, will in general be a proper quantity; which may be increased, as the eye can bear it; for when the intention is to brace up the relaxed vessels, some little degree of pain becomes necessary. When the defluxions is great, a scruple of compound powder of cerus, tutty, or calamine, may be added; but no powders should be used in the first state of inflammation.

As the eyelids are frequently glewed up in the morning, after a nights sleep; to prevent this inconvenience, they may be smeared at going to bed with a little tutty, or spermaceti ointment; or the linseed poultice may be applied over them, washing them in the morning with a sponge dipt in milk and water.

Particular attention should be had to the patients habit of body, as causes independent of the inflammation may subsist. Thus a lurking, or intermitting fever may accompany; on the removal of which by the bark, and other medicines, the recovery of the eye depends;

pende : and sore eyes from a venereal, or scrophulous cause, must be remedied by medicines adapted to those particular complaints, or no cure can be expected.

After the use of cooling, and repellent medicines at first, to abate the inflammation, those of a discutient nature may be used ; and sometimes they are happily joined together ; thus, rags dipt in three parts of vinegar, and one of camphorated spirit of wine, and kept constantly over the eye, will sometimes prove an efficacious remedy.

To this end, the eye washes may be animated with camphor, hungary water, &c; thus, pour half a pint of boiling water on a dram of white vitriol, and a scruple of camphor, and decant, when cold ; with this the eye may be frequently washed, and if it be found too sharp, must be diluted with water.

The following ointment is very successfully used, in one of our most celebrated Hospitals ; is superior to that of Sir *Hans Sloane's*, and will be found extreamly serviceable in most disorders of the eye, after the inflammation is removed. Rub together a dram of tutty, and calamine finely lœvigated, with a scruple  
of

of camphor, half a dram of white vitriol, and two ounces of ointment of elder, this may be used twice a day by means of a pencil, drawn over the eye.

To prevent blackness from a blow on the eye, let compresses of linnen, lightly squeezed out of salt water, and vinegar, be constantly applied over it in the day : and a poultice of alum curd, and powder of roses may be applied at bed time. To resolve the blood when it has already blackened the eye, it should be fomented twice a day, with the discutient fomentation ; and a compress four, or six times doubled, may be dipt in mindererus spirit ; to which sometimes, a fifth part of camphorated spirit of wine may be added, and kept constantly applied to it : a solution of any alkaline salt in water ; or equal parts of spirit of sal armoniac, or sal volatile and water, may be used for this purpose.

The opthalmia, or sore eyes, which arise from a strumous, or rheumatic cause, will require such medicines as invigorate the circulation, and attenuate and expel the morbid humours. The Peruvian bark, has of late years been strongly recommended for these purposes, and indeed often answers every intention of cure, if a few mercurial purges be interposed, during the course. To



To the decoction of the bark, a proper quantity of the tincture of guaicum may be added, in strumous, or rheumatic cases; and in venereal ones the sublimate solution may be given, with a decoction of sarsaparilla.

Continual blisters, setons, and issues, have likewise their particular advantages, by drawing the humors from the eyes, and diverting them into other channels; a semi circular caustic applied behind the ear is sometimes very successful.

To remove specks from the eye, equal parts of white vitriol, or sal armoniac, and sugar candy may daily be blown into it; a few drops of aqua sapphirina of the shops may be used for this purpose; with the above mentioned ointment, or that of Sir *Hans Sloane*; which in general are more efficacious than liquids, as they are retained longer on the part.



### C H A P. XXVIII.

*The Peripnumonia, or Inflammation of the Lungs.*

**T**HIS disorder is known by a difficulty of breathing, and short cough; a load, and oppression of the breast, with a continual fever.

fever. It is distinguished from the pleurisy, by the little, or no pain attending it; whereas the latter, in inspiration, gives the patient very acute pain: the pulse is not so hard in this disease, as in the pleurisy, and other inflammatory distempers; but on the contrary, tho' generally found quick, is much softer. The patient is obliged to lay almost continually on his back, being able to rest, but rarely on either side; the cough is frequent, sometimes dry, at other times accompanied with a spitting, mixed with blood, and a difficulty of breathing.

This, like all other inflammations, is terminated by resolution, suppuration, or gangrene. To resolve the inflammation, bleeding, especially in the beginning of the disease, is unexceptionable necessary; and should be repeated, according to the urgency of symptoms, and the strength of the patients; the pulse, and difficulty of breathing, will be the best directors: It may be necessary however to observe, that these do not in general require so great a loss of blood, as some other inflammations; as they are often relieved by a plentiful spitting of well concocted, yellow matter; which if streaked with blood, is a most

most salutary sign. If at the same time a sweat breaks out, and the urine deposits a copious sediment, we may pronounce a termination of the disease.

With requisite bleedings, the treatment should be by plentiful dilution with soft, emollient liquors, such as barley water, pectoral drink, and emulsions, with a proper quantity of nitre, frequently given in them; to which the juice of oranges, or lemons may be added: for it avails little to draw off part of the sizely, inflammatory blood, if the remainder be not cooled, and thinned by the above medicine, or the neutral salts, with plenty of diluting liquors, which should be sipped down warm every half hour: those prepared with barley water and liquorice, or linseed, are perhaps as good as any others.

An emollient glyster with a dram, or two of nitre, should be daily thrown up; and the feet be bathed every night, for fifteen, or twenty minutes, in warm water: to ease the cough, sperma ceti broke with the yolk of an egg, and incorporated with barley water, and a little sugar; or any soft oily medicine may be frequently given for this purpose; to which occasionally may be added, to assist the spitting,

a tea



a tea spoonful of oxymel; and to ease the violence of the cough, after due evacuations, the same quantity of the paregoric elixir may be ventured on; proper regard being paid to the difficulty of breathing, which some opiates increase.

As this distemper is generally terminated by spitting, great attention should be paid to it; and when it advances kindly, bleeding should be omitted; and this excretion be promoted by the above ptisans, drank of liberally, with the soft oily medicines recommended. The steams of warm water, and vinegar, drawn into the lungs, with emollient fomentations to the chest, will often be found of great efficacy for this purpose, and the vapour of vinegar alone, on some emergencies, will be particularly so.

Blisters to the sides, or back, particularly to the pained part, will be found very beneficial; as they shorten the cure, save the blood, greatly relieve the breast, and promote expectoration: and if more should, in the course of the disorder be found necessary, they should be applied to the legs; the patient frequently inhaling the steam of an infusion of pectoral herbs.

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While

While the symptoms of inflammation prevail, nitre, and the saline medicines should be chiefly given; but when the pulse flags, and expectoration, or spitting is suppressed, they should be exchanged for the volatile salts; ten, or fifteen grains of which should be given every four, or six hours; with the cardiac confection, or some other warm cordial.

We should not depend too much on the complexion of the blood, for the repetition of bleeding, without other concurring circumstances; such as the intenseness of the fever, and fulness of the pulse: for sometimes the sizzly, or buff complexion on the surface, does not appear 'till the second, or third bleeding; this crust perhaps not being yet formed: nor must we be deceived by its trickling down the arm from the orifice; by too strait a bandage; or from its not spouting forth in a full stream; all which circumstances will alter its appearance, though ever so sizzly.

Nor indeed, ought we to be too credulous, in supposing the same can enable us to judge with certainty, of its real state in the body; for we often meet with sizzly blood in the most healthy, where there is not the least symptom of inflammation; and frequently we see the  
same

same appearance continues after the fever, and inflammatory symptoms are removed: so that we must not form our ideas of the fever, from that only.

If the obstruction, and inflammation is not soon dispersed, or removed, or the expectoration, or spitting be begun; a suppuration, or collection of matter will be formed in the lungs, and this generally happens about the seventh day, and is called a vomica; and as it is frequently succeeded by a pulmonary consumption, we must refer to that Chapter for its treatment.

It may be necessary to observe, that at first what is spit up, is thin and crude, but soon becomes of a whitish yellow colour, and thicker consistence; and about the third day, begins to be streaked with blood; or the blood is so incorporated with it, as to give it a bloody tinge, these are good symptoms; but when a froathy blood is spit up, or a thin, gleety foetid, dark coloured matter is thrown off, it shews the blood is in a putrid, dissolved state; that the fever is attended with malignancy, and consequently a stop must be put to drawing off more blood.



Vapours, or fumigations must undoubtedly be of great use, in many disorders of the lungs, as their medicinal powers are conveyed immediately to the grieved part, and unaltered: they may be made more or less stimulating, or relaxing, as the case requires. In malignant cases, the fumes of vinegar itself, has been found of great service, and when camphor has been added, it has been found more efficacious. As several kinds of medicines may very advantageously be introduced this way, it is pity this method of medicinal conveyance to the lungs is not more studied, and practiced. Consult *Bennet* on consumptions.

The termination of this disorder by gangrene is not unfrequent, where early, and plentiful bleeding has been neglected: drawing off blood from both arms at once has been attended with surprising good effects; and bleeding in the foot should oftner take place, than is commonly practiced. When the patient is low, and the pulse flags, cupping may be substituted in the room of bleeding.

When the diaphragm, or midriff is inflamed, the pain is violent, and seated in the lower part of the breast, or under the spurious ribs: the belly is contracted, the respiration rapid, short,

short, and difficult, being effected chiefly by the muscles of the breast; the pulse is generally quick, small, hard, and frequently irregular; the patient is affected with great anxiety, sickness, and hiccup.

The method of treatment may be collected, from what has been already laid down, in regard to inflammations of the chest.



## C H A P. XXIX.

*The Pleurisy.*

**T**HE true pleurisy, is an inflammation of the pleura, or membrane, which lines the inside of the chest: it is known by sharp pains, and stitches in different parts of the breast, and sides; extending sometimes towards the shoulder blades, and spine: it is attended with a fever, and almost constant cough; the pain is increased by inspiration; the pulse is hard; the blood sily, and inflamed: it is frequently attended with inflammation of the lungs.

Bleeding is the first, and chief remedy, and should be briskly pursued, particularly in full,

robust habits, before the inflammation is rivetted: thirty, or forty ounces of blood are frequently drawn off, before the inflammation yields; which if it does not in a few days, usually terminates in an abscess, or gangrene.

The treatment laid down in the preceeding Chapter, should be here pursued, by evacuations of blood, and by stool; the antimonial powders; the saline draughts with nitre; blisters, and fomentations; and when the pulse is lowered, with volatile salts in full doses. Plentiful dilution is also necessary, as recommended above, with emollient glysters.

After a pretty copious bleeding, or two, a large blister applied over the pained part, has often been found to give immediate relief: but before this remedy is made use of, the part may be well fomented with an emollient fomentation; or with a solution of hard soap in milk and water: it should afterwards be bathed with the volatile liniment, or with marshmallow ointment; and a thick flannel wetted with the fomentation, should be applied hot over it; the heat being retained by warm tiles, or bladders, filled with hot water; and these may be constantly renewed, as they grow cold.

Great



Great care should be taken, that the patient be not kept too hot, and that the air of the room be frequently renewed: this disorder is generally terminated by spitting, especially if it be plentiful, streaked with blood, and the pain is mitigated thereby: a white, reddish, and sometimes brownish sediment in the urine, is a favourable circumstance, and if accompanied with general kind sweats frequently terminates the disorder. Cupping the part is often successful, especially if a blister is immediately applied over the scarifications. Gentle opiates, discreetly used, after plentiful evacuations, are also of great service.

The bad symptoms are, when the pain is not relieved by bleeding, when the cough is dry, and a thin yellow spitting is thrown off with difficulty; the urine high coloured, the pulse intermitting; sudden abatement of pain, yet difficulty of breathing continues; rigors, and shiverings, the forerunners of matter forming, or mortification.

The goats blood, stone-horse dung, &c. formerly deemed specifics in this disorder, are now justly rejected; and their place is supplied by neutral salts, blisters, and volatiles; to which twenty, or thirty drops of the anti-

monial wine may be added every six hours, as, beside other good properties, it manifestly assists expectoration. A decoction of the seneka rattle snake root, is much extolled by some, for this disorder; and is said to promote spitting, to keep the body open, and to operate by sweat and urine.

If fizy blood is the immediate cause of inflammatory diseases, it is much to be lamented, that the *Materia Medica* is so deficient in medicines proper to fuze, and attenuate it. But perhaps the fize alone is not the cause, but some stimulating particles in the blood, which fixing on, and irritating the membranes, may occasion inflammation, in the same manner, as a thorn stuck in the flesh, or the sharp ichor of a whitlow, lodged round the nail, shall frequently produce inflammation up to the shoulder.

THE BASTARD PLEURISY, is the reverse of the above, and the local pain is imagined sometimes to arise from an acrid serum, lodged on the intercostal muscles; as it is attended with an acute, pricking pain of the side, which is exasperated by the touch, and lying on the affected side; a dry cough attends, oppression of

of the breath, and fever with depressed pulse; it chiefly affects the phlegmatic, and weak.

The removal of this disorder, should be attempted by a bleeding, and gentle purges; by cupping, and blistering the pained part, and by such attenuating medicines, as will promote spitting: for this purpose the volatile saline draughts with lemon juice, and salt of hartshorn; and a solution of gum ammoniacum, with oxymel squills, will be proper; to which may be added, some drops of antimonial, or ipecacuana wine; both which in proper quantities, will act as attenuants, sudorifics, and expectorants. The liquors recommended by *Huxham*, are infusions of the pectoral herbs, barley water, or a thin mustard whey, sweetened with honey, and sharpened with lemon juice. But the different degrees of fever, and state of the pulse, must determine the use of the attenuating medicines, or those of a cooler kind.







C H A P. XXX.

*Of the Cardialgia, Heart Burn, loss of Appetite,  
Indigestion, Hiccup, &c.*

**G**REAT attention should be paid, to every disorder of the stomach; as, on this organ, performing its functions properly, health depends: any deviations or errors, in its digestive powers, must be productive of crude chyle; which is not only unfit for the due nourishment of the body, but is often productive of many diseases in the constitution, which have their source from this fountain.

The *Cardialgia*, or *Heart Burn*, is an uneasy sensation of heat, and pain, about the pit of the stomach: it is sometimes attended with nausea, sickness, vomiting, and head ach.

This disorder is supposed to arise from some acidity, or acrimony, in the juices of the stomach, stimulating the right orifice, and exciting pain. When it happens in a morning, and arises from indigestion, it is frequently removed, by diluting the acrid juices with a draught of water, chamomile, or green tea; but

but when it proceeds from a foul stomach, loaded with the above contents, a puke should be taken, and worked off with plenty of chamomile tea: the next day, a stomach purge, as *Ruffus's* pill, or the sacred tincture, should be taken, and repeated, in order to carry off any remaining acrimony.

To palliate the symptoms, and remove the heart-burn, when it is slight, a tea spoonful of magnesia should be given, and repeated 'till the pain abates; if it operates not by stool, a proper quantity of rhubarb may be joined with it: twenty, or thirty drops of deliquiate salt of tartar, and spirit of hartshorn, are often successfully given in a glass of water.

To absorb, and neutralize the acid juices, that occasion this disorder; a due quantity of the testaceous, and other absorbent powders, are successfully given; as crabs eyes, oyster-shell powder, chalk, with, or without a little nutmeg. Split peas, or a few almonds, are often chewed for this purpose; but those who are much troubled with this disorder, may carry in their pockets, lozenges prepared with equal parts of oyster-shell powder, and chalk, and a few drops of oil of cinnamon, or nutmegs, with a sufficient quantity of gum arabic mucilage.

The

172 *The Cardialgia, Heart Burn, loss of*

The chalk julep, made with an ounce of chalk dissolved in a quart of water, three drams of gum arabic, and six of sugar, may be taken of liberally: and for this purpose also half a pint of lime water may be given occasionally in some cases.

When the juices of the stomach are become so acrid, as to produce incessant vomitings, which neither a puke, antiemetics, or the usual stomachic medicines can controul; the stomach should be well washed, and the acrimonious humours be diluted, with some gallons of chicken water, or small mutton, or veal broth; and the vomiting should be continued, 'till what is thrown up, has no other taste, than that of the broth. In some cases of this kind, the putrid juices of the stomach, acquire almost a caustic quality, and should be treated as poisonous: after the operation a warm cordial opiate should be taken.

Where an acid humour prevails on such occasions, magnesia cannot be given too liberally; and should be repeated, to the quantity of a dram, or two, every two, or three hours, 'till the pain is removed. It generally purges considerably, thus taken; if it does not, rhubarb, or other stomach purges must be interposed.



A periodical pain in the stomach, is sometimes to be treated, as an intermittent fever, which the bark will frequently relieve: and when the tone of the stomach is much impaired, this medicine in infusion, or decoction; or joined with warm aromatic bitters, is principally to be depended on.

In some violent vomitings, salt of wormwood, and lemon juice, should be swallowed in the very act of fermentation; in others, small quantities of opium, must be given to abate the spasms, and irritation; sometimes external applications are successful, as a fomentation of aromatic herbs, or spices, with vinegar, or spirits; or a cataplasm of Venice treacle, with cinnamon, cloves, and mace; and in some cases, two, or three spoonfuls of burnt brandy, or spiced red wine, will instantly allay the most violent: a tea spoonful of æther on a lump of sugar, is sometimes also given with success; and a strong infusion of dried mint, sipped down hot, will frequently stay on the stomach, when nothing else will.

*A loss of appetite* may proceed either from some defect, or fault in the stomach, or from the juices secreted in it. An original debilitated, or an acquired relaxed state of the coats

174 *The Cardialgia, Heart Burn, loss of*

coats of the stomach, is often the cause of a depraved appetite, in which cases, phlegm, or viscid humours abound, and adhere to them.

These humours are sometimes of an acid nature, and create the sensation above described, called heart-burn; nausea, and flatulencies: putrid, bilious, glutinous, and acrimonious humours, often abound therein; and occasion offensive belching, bitter taste in the mouth, an oppressive load at the stomach, sharp pains, and of course a depraved appetite, and indigestion.

Under these circumstances, the stomach should be cleared of such contents by repeated vomits of ipecacuana, or salt of vitriol, given in a morning, and workt off with chamomile tea, or an infusion of horse-radish root: The next day, a warm purge should be given, of three ounces of hiera picra tincture; an ounce of aloetic wine, or half a dram of *Ruffus's* pill; which should be repeated two, or three times, at proper intervals.

Intermediately the bitter infusion, N°. xx. may be taken, to which may be added two, or three drams of the bark, or a cold infusion of this latter alone.

When

When the tone of the stomach is enfeebled, and debauched by spirituous liquors, twenty drops of elixir of vitriol may be taken twice a day with the bitter wine, and infusion; interposing now, and then, a gentle aloetic, or rhubarb purge; if these succeed not, recourse must be had to the *Bath* waters: when they cannot be drank on the spot, those of Spaw, or Piermont, must supply their place. In all disorders of the stomach, and bowels from relaxation, rhubarb chewed, or taken in small quantities is extremely useful.

Solid forms sometimes succeed best, as they are longer retained in the stomach, and may be composed of zedoary, cassumunair, the aromatic species, winters bark, and such like; beat up into an electary, with conserve of orange peel; or formed into pills with any syrup.

In *flatulent*, or windy disorders of this organ, a scruple, or half a dram of chamomile flowers fresh powdered; orange peel; or cardamon seeds, may occasionally be taken: or a tea spoonful of the tincture of the latter in a cup of chamomile tea.

*Spasmodic*, or cramp like pains of the stomach, are removed by warm, cordial, aromatic medicines, to which opiates may occasionally



## 176 *The Cardialgia, Heart Burn, &c.*

sionally be joined: for this purpose the balsam of Peru, the traumatic balsam of the shops, and *Bate's* anodine balsam may be taken, to the quantity of twenty, or thirty drops, twice, or thrice a day, in any vehicle.

For this purpose also the gum, and aromatic pill of the shop may be given to the quantity of a scruple for a dose, twice in a day; to which may be added, or given alone, in case of great pain, the same quantity of *London Philonium*.

*Rheumatic*, and gouty pains in the stomach are to be treated with the above warm medicines; to which guaicum, and cinnabar of antimony will be joined advantageously; or a tea spoonful of the balsam, or tincture of guaicum, may be given twice, or thrice a day in a glass of warm water.

It will be necessary in all the above cases, to keep the belly open by the warm stomach purges; and to be particularly attentive to the symptoms, in order to discriminate the disease; as many seeming disorders in the stomach, have had their source from a swelled, and obstructed liver.



178 *Diarrhæa, or Looseness.*

the best remedy of all is ten, fifteen, or twenty grains of musk, given in a bolus, and repeated occasionally : a glass of strong vinegar is sometimes successful.

If these should fail, a judicious use of opiates should be given alone, or joined with the above ; and a plaister should be applied to the stomach, made of an ounce and a half of *Venice* treacle, half an ounce of cinnamon powdered, and three drams of expressed oil of mace, mixed up with syrup of ginger. Bags of the warm aromatic herbs may be applied also, or bladders filled with their decoction made hot.



C H A P. XXXII.

*Diarrhæa, or Looseness.*

**A** Frequent discharge of liquid stools from the intestines, is called a diarrhæa, or looseness : the pains and gripings of the belly, are not so violent in this distemper, as in the dysentery, or bloody flux, by which it is distinguished.

It may arise from any cause, or acrid humour, which can stimulate the bowels to excretion ;



cretion; and as bad humours are frequently thus evacuated, it of course is not hurtful, but frequently advantageous.

We should therefore be careful in distinguishing the nature, and cause of the purging; whither it arises from checked perspiration, or from something noxious, expelled from the circulation, and thrown on the bowels, as a critical deposit; or whither owing to indigested matter passing from the stomach into them: If the looseness be accompanied with a fever, let a proper quantity of blood be taken away; if it be with loathing, and sickness at stomach, thirty grains of ipecacuana should first be given as a puke; after the operation of which, repeated doses of rhubarb, or castor oil, should be taken, in order to expel the acrid matter, or irritating cause, through the bowels.

If the purging be critical from a fever, let it not be suppressed too soon, but rather favour this intention of nature: and if it succeeds an obstructed perspiration, the flow of humours should be diverted from the bowels to the skin, by perspirative medicines; among which, small doses of ipecacuana, *viz.* two, three, or four grains, joined with a little mithridate, and given at bed time, will frequently obtain this end.

If the purging be not removed by the above means, or should return with gripings; more rhubarb, or other gentle physic, should be taken, to carry off the acrid matter; when the bowels may be quieted, with half a dram of mithridate, or diascordium going to bed; and the belly should be swathed in flannel. *Dover's* powder is often of use here to restore perspiration.

No restraining medicines should ever be given, 'till the griping, or offensive matter, which occasion it, be removed by opening medicines: and, indeed, those of an absorbent nature, as crabs eyes, magnesia, chalk, &c. are often to be preferred to them, as they obtund, and attemperate the acrid humours; which the others may lock up prematurely, unless purgatives are joined with them.

On this account, after proper evacuations, ten grains of rhubarb, is often successfully joined, with double the quantity of mithridate, diascordium, or the cardiac confection; to which the same quantity of chalk may be added, and taken night, and morning. Rhubarb, and nutmeg toasted, may be given in the same manner alone, or occasionally joined with the above.

When

When the stools are so profuse, that it becomes necessary to controul them, and strengthen the relaxed tone of the bowels, a scruple of diascordium should be frequently given, or a dram of the extract of logwood; to which may occasionally be joined, a fourth part of japan earth, and tincture of cinnamon; and a few drops of thebaic tincture.

For this purpose also, restringent glysters are frequently necessary; they may be prepared by boiling a quarter of an ounce of pomegranate root, and balaustins, in three quarters of a pint of water, to half a pint; and in the strained liquor, dissolve three drams of diascordium, and half an ounce of japan tincture; they may be injected twice, or thrice a day.

Some for this purpose, depend much on ipecacuana, given to the quantity of two, three, or four grains, every six hours, with a little diascordium, or cardiac confection; and direct half a dram of the same, to be thrown up daily by glyster; to which may be added, when the bowels are sore, and tender, two, or three drams of starch, and mithridate.

It would be endless to give more forms for this purpose, as they must be diversified



according to particular indications : but as the following has been deemed a specific by some, after due evacuations ; we shall close this Chapter therewith : mix three drams of powdered sponge, and a dram and a half of henbane seeds, with an ounce and a half of conserve of roses, and any syrup ; take the quantity of a nutmeg, three, or four times a day, with a tea spoonful of cinnamon tincture in a glass of water.

Burnt cork has also been successfully given, in the same manner, to the quantity of a dram for a dose ; and in those cases, where a sharp humour is the cause, may prove efficacious.

It may be necessary however to observe, that some loosenesses, are owing to a defect in the stomach, not properly digesting the aliment, and passing off a crude ill-concocted matter into the intestines. When this is the case, gentle vomits of ipecacuana, must frequently be given, and the tone of the stomach be strengthened by warm bitters, the bark, steel, and *Bath* waters. *Vide* Chap. on cardialgia, indigestion, &c.

When violent pains in the bowels are occasioned by too strong physic, mercury, &c. plenty of fat broths should be taken by the mouth, and thrown up by glyster ; in which,  
may

may occasionally be dissolved, half an ounce of *Venice* treacle, or mithridate, with the yolk of an egg well broke: the same quantity of starch may also be dissolved in the above, or tripe liquor, with two, or three grains of opium; or fifty, or sixty drops of liquid laudanum; and these must be repeated, if they are too soon rejected, or the pains are not mitigated thereby: for they are intended to supply the guts, with an artificial mucus; and to abate the irritations, on their defenceless coats.

In all disorders of the bowels, due regard should be had to diet, and regimen: beer, and all fermented liquors should be avoided, as most pernicious. The drinks should be of burnt hartshorn, or logwood, boiled with cinnamon, and gum arabic; red wine, or brandy and water; the diet should consist of sago, panada, rice, salep, hartshorn gelly, &c. with broths prepared with the same; and when the stomach can do its office, the lightest of white meats may be permitted. In habitual purgings, riding on horse back is of the utmost consequence; which may be assisted by swath-  
ing the belly with flannel, and keeping the body warm: rubbing the belly daily with a flesh brush, or coarse cloth, contributes, both

184 *The Use of Castor Oil, in Disorders*

to strengthen the bowels, and encourage a free perspiration. *Vide* Chap. on dysentery, p. 193-4.

There are some kinds of purging, from acrid humours in the bowels, which are relieved by drinking a pint, or more of oyster shell lime water daily, with, or without milk.



C H A P. XXXIII.

*The Use of Castor Oil, in Disorders of the Bowels, and Kidnies.*

AS this medicine, which is the product of the *West Indies*, from the kernels of the Palma Christi tree, is not so generally known in *Europe*, as it is in *America*; (though it is in great esteem here, with those who are acquainted with its true value;) we thought it would not prove unacceptable to some of our readers, to have laid before them some account of its virtues, and good effects, in particular disorders of the bowels.

Whoever is acquainted with the spasms, and inflammations incident to these parts, must have lamented the necessity of sometimes having recourse to strong irritating purges; after having



*in vain* tried the milder kind, to open some obstinate obstructions of the bowels: as there is reason to believe, that the complaints have been fatally aggravated, by the violent irritations they have produced.

This medicine therefore is offered as a mild purge, to supersede their use; and has been found by experience, very successful in removing the most obstinate constipations of the bowels; whither arising from *bile, inflammation, or spasms*; especially in what is called the *dry belly ach*: and this it effects, by lubricating the bowels; blunting the acrimony of the bile; softning the fœces; and lightly stimulating the intestines to perform their office. The common method of giving it, is a table spoonful or more, every hour; the third, or fourth spoonful generally producing a stool: it likewise makes an effectual ingredient in glysters, when it is rejected by a squeamish stomach. In order however to make it agreeable to such; two, or three spoonfuls, may be given in pepper mint water; or it may be incorporated first with a sufficient quantity of the yolk of an egg and sugar, before the intended vehicle is added to it, which must be adapted to particular constitutions.

But

186 *The Use of Castor Oil, in Disorders, &c.*

But as some disorders of the bowels, are attended with violent retchings to vomit, so that nothing can be retained on the stomach, in such cases, a gentle puke must be previously given; or the saline draughts in the act of fermentation, with, or without a grain, or more of opium; in order to mitigate the pains, and prepare the stomach for the reception of the oil: to some it is made more acceptable, by adding lemon-juice and sugar: and it will be necessary to drink plentifully of warm diluting liquors, as with other mild purges.

In bilious disorders, it has been found particularly useful, by sheathing the acrimony of the bile, and at the same time pushing it gently through the bowels. It is very properly also given as a purgative at *the beginning* of dysenteries; as it relaxes the bowels, abates the tormina, or gripes, and purges with little irritation: a tea spoonful may be given to a new born child, to clear the bowels.

In calculous complaints, to facilitate the passage of gravel, or stones, from the gall bladder, or kidneys, it is particularly useful; and when the pain and inflammation is removed;

moved; if two, or three spoonfuls be given twice a week, and a tea spoonful of soap lees every day, in veal broth, or milk and water, and continued for some time; there can be no medicines more effectual for dissolving soft stones, or preventing gravelly matter from coalescing into a calculous substance.



C H A P. XXXIV.

*Dysentery, or Bloody Flux.*

**T**HE dysentery is a flux, or discharge from the bowels, of bilious stools, mixed with a slimy matter, and often with blood; attended with severe gripings, nausea, and vomiting, with frequent propensity to go to stool: a fever, greater, or less, generally accompanies it.

It is occasioned by putrid bile thrown on the bowels, whose irritations produce, both the pain, and discharge: in consequence of which, the guts become inflamed, and frequently ulcerate, and mortify.

The manner of treating this disorder, is by bleeding, if a fever accompanies; and by repeated vomits, and lenient purges, to evacuate the



188 *Dysentery, or Bloody Flux.*

the acrid humours contained therein; lastly by agglutians, opiates, and astringents.

When the disorder is mild, *plentiful* dilution with cold whey, or water, taken by the mouth; and at the same time injected warm by glyster, will frequently prove successful; but for this purpose, gallons must be used: and where medicinal help is not to be obtained, this method should be put in practice, for two, or three hours together.

As nausea, and sickness are usual attendants, the cure at first, should be attempted by vomits; which, with the putrid contents of the stomach, generally discharge a quantity of bile: for this purpose, ipecacuana may be directed; and if the patient be strong, two, or three grains of tartar emetic may be joined with it; as that medicine commonly operates by stool, and is of remarkable service, in bilious complaints.

It is frequently also joined with a mild purgative, as manna, cassia, or lenitive electuary, in order to obtain both these intentions: thus three, or four grains of tartar emetic, and two ounces of manna, cassia, or lenitive electuary may be dissolved in a pint of barley water;

*Dysentery, or Bloody Flux.* 189

water; a quarter of a pint of which may be given every half hour, 'till both these evacuations are fully obtained.

After the vomit however, gentle purges are absolutely necessary to carry off the corrupted humours; and these should be given in such a manner, as to procure daily a free discharge by stool. A solution of manna, and soluble tartar, in a decoction of tamarinds; or even the purging salts and manna, are proper for this purpose.

These saline purges, to which six drams of oil, broke with a little yolk of egg may be added, are to be preferred to others; as they irritate less, and produce copious evacuations: and though rhubarb has generally been esteemed a proper purge on these occasions, yet it is thought not to answer so well in the beginning, as when the griping pains are removed; which perhaps may at first be effected by castor oil alone.

The patients diet should be rice gruel, sago, panada, milk thickened with barley, oatmeal, flower, or rice: no animal food, not so much as chicken broth, should be allowed at the beginning of the disease; nor oil, butter, or fat

190 *Dysentery, or Bloody Flux.*

fat of any kind. The common drink may be almond emulsion, rice, or barley water, with gum arabic, to which a third part of milk may be added; and these should be taken in large quantities, to dilute the acrid humours.

Opiates are in general condemned, but after plentiful evacuations have been obtained, they may be given in quantities sufficient to mitigate the pain, and procure rest: when given with glysters, they are most successful.

If a fever attends, the saline mixture, N<sup>o</sup>. ix. should be given every four, or six hours; to which a few drops of liquid laudanum may be added; or half an ounce of spirit of mindererus in a draught, with a scruple of mithridate, in order to keep up a free perspiration.

No restraining medicines should be given, in the first stage of this disorder, 'till the putrid humours have been properly diluted, and carried off by evacuations.

When the pain, and tenesmus is violent, a chicken broth glyster, or an infusion of linseed, with an ounce, or two of oil of almonds dissolved



*Dysentery, or Bloody Flux.* 191

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dissolved in the yolk of an egg, may be thrown up twice a day; to which thirty, or forty drops of thebaic tincture may be occasionally added: for this purpose, two drams of *Venice* treacle, or mithridate, dissolved in six ounces of thin starch, and one of olive oil, may be also injected.

Fomenting the belly, and drinking chamomile tea, is of great use in allaying pains; but when they are fixed, and will not submit to the above, they are relieved by a blister on the part affected, or cupping with scarification.

The castor oil, mentioned in the preceeding Chapter, may occasionally be given, according to the directions there laid down.

To brace, and restore the tone of the bowels, gentle astringent medicines are at first directed; a scruple of diascordium, or extract of logwood may be frequently taken; or a scruple of bole, and the cordial confection with a grain of opium, thrice a day: *Vide* also N°. xxv.

The restraining glyster in the preceeding Chapter may now be used, or that with ipecacuana; and if the bowels are excoriated, two, or three drams of starch may be added, or the same quantity

192 *Dysentery, or Bloody Flux.*

quantity of *Lucatellus* balsam, or turpentine, broke with the yolk of an egg : two, or three grains of opium, may be occasionally added, or half an ounce of *Venice* treacle ; these generally give more relief, than anodines administered in any other way.

The Bishop of *Cloyne*, strongly recommends a glyster, prepared, by dissolving an ounce of common brown rosin, in two ounces of oil, over the fire, and adding to it a pint of broth, to be given once, or twice a day : this may succeed in some cases ; but whoever depends on this, or any other remedy, as a specific in this disorder, will be disappointed.

The following emulsion of bees-wax, has sometimes been found of great use, after evacuations. Take of white, or yellow wax, three drams, *Spanish* soap, one dram ; melt them in an ounce of water over the fire, in an iron ladle, stirring continually with a spatula ; then pour them into a marble mortar, and add by degrees a quart of water, and an ounce of treacle, and brandy.

When this disorder is attended with a malignant fever, the bark, and diascordium, may be given together, every four hours, with the mindererus spirit ; or a decoction of the bark,  
and

and snake-root, with some drops of laudanum; interpoling a purge, to carry of the noxious humours in the bowels.

The following medicine has often been found very efficacious: melt a dram of bees-wax, in an iron ladle, then add to it an ounce of glass of antimony finely powdered; keep constantly stirring them with a spatula, over a slow fire, then take it off, and pour it upon a piece of clean white paper; powder, and keep it for use.

The dose is from six grains, to a scruple, in strong habits; its operation is by vomit, and stools; and it may be given every, or every other day, according to the operation: and if it vomits, warm water may be taken; otherwise, nothing for three hours.

Ripe summer fruits, which by some, are thought productive of this disorder; are by others, thought to counteract it; and found to be of great service in the removal of it, by correcting the putrid bile, and controuling its energy: and indeed, it should seem to be very rational practice, if they are not given in such quantities, as to irritate the bowels; for considering the putrid nature of the disease, nothing  
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can be more strongly indicated, than vegetable acids.

For this purpose, therefore, lemon juice, and oil, have been successfully given; and we are told, that agreeable to this method of sheathing the acid, the *German Hungarians* put cream, and vinegar, into separate vessels, and with two straws endeavour to suck up equal portions of each. Pure air is of the utmost consequence in the cure, which should frequently be renewed, by burning vinegar in it: bed pans, and close stools, should instantly be removed out of the chamber; and the patients linnen may be frequently changed.

Many medicines have been recommended for the cure of old dysenteries, as the *Conefi bark*, in substance, or decoction, the *Eleutherian bark*, and that of *Semiruba*; all which have been found serviceable, in different cases; as well as in obstinate diarrhæas, or loosenesses.

Thus, we see, the best method of treating recent dysenteries, is by plentiful dilution, vomits, and soft saline purges, and with occasionally opiates, after due evacuations: between which, the saline mixture, may be freely given to correct the putrid bile, and remove the fever: to which a grain of tartar emetic,

emetic, or thirty grains of rhubarb may be added, once in twelve hours, on the return of griping pains, from bilious recement retained. Mild astringents, and corroborants, after removing the putrid contents of the bowels, are then both safe, and necessary. — The bark with astringents, and opiates, agreeing best with some, decoctions of semiruba with others. — Chalk in electaries, and juleps, with others. — Anodyne, and restraining glysters, with others; and with others, a combination of opium, and ipecacuana, viz. two grains of the former, and three of the latter, taken night and morning. — Air, exercise on horseback, and a proper nutritious diet, are necessary to compleat the cure; thus we see no uniform method of treatment will succeed in all cases, and that the most successful must be properly timed, to render them efficacious.

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*C H A P. XXXV.**Colics in general.*

**T**H E R E are no disorders that require more attention, and care, in their management, than colics, or disorders of the bowels; as an improper treatment, is often productive of the worst consequences.

They may be divided into three species, viz. the flatulent, or spasmodic; the colic from irritation; and the bilious, or inflammatory; which are often succeeded by the *Iliac* passion, or *misereri mei*, and that by mortification.

In all colics, our first view, should be to remove the offending cause, and not palliate the symptoms only, by mitigating the pain; for by these means, the cause is locked up, and mischief must ensue. Hot drams, and spicey medicines, have often converted a simple colic, into an inflammatory one: and it were better, in many cases, where proper help cannot be obtained, to drink plenty of chamomile tea, or warm water with a little salt in it; giving at the same time repeated glysters of the same, with three, or four spoonfuls of oil; and fomenting the belly also with hot water; than to risk danger, by heating, and other improper medicines, which may not only aggravate the disorder, but even render it fatal.

Indeed, as no small skill, is sometimes requisite to distinguish the different species of colics, it might be better in general, to attempt their removal at first, by repeated doses of *magna* and salts; castor oil; or rhubarb, and  
cream



cream of tartar ; with the above mentioned oily glyster, to open the bowels, and bleeding ; than to hazard danger by more powerful medicines.

It may be proper to observe, that, as ruptures with stricture of the gut, produce most of the symptoms incident to colics ; inquiry should always be made after this circumstance ; as, through false modesty, or ignorance, it is often concealed.

Should a rupture therefore be found, either at the navel, or groin, let the patient be blooded largely ; and after fomenting the part with warm flannels, dipt in milk and water, let a thick bread, and milk poultice with oil, be applied, 'till an able surgeon can be procured. In the mean time, a tobacco glyster may be thrown up either of the fumes, or decoction of this herb ; and if the rupture be in the scrotum, after the application of the poultice, let it be carefully suspended by a proper bandage ; and let the knees be bent, and elevated, to relax the muscles of the thighs, and abdomen, and lessen the stricture on the gut : after the large bowels are emptied, let two ounces of the common purging salt, be dissolved in a quart of common, or mint water ; of which, a quarter of a pint, may be taken every quarter,

198 *Flatulent, or Spasmodic Colic.*

or half hour, 'till it operates: this medicine is generally to be preferred, to more stimulating physic, which increases the obstruction, and pain, if it fails in procuring the expected evacuation by stool: but in these cases, the early assistance of a skilful surgeon is of the utmost importance.

In the subsequent Chapters however, we shall endeavour to lay down their different treatment, after distinguishing them from each other, by their proper symptoms.



C H A P. XXXVI.

*The Flatulent, or Spasmodic Colic.*

**T**HIS colic often arises from taking cold, especially in the feet: the pain comes on by fits, flies about from one part of the belly to another, and is relieved by a discharge of wind, either upwards, or downwards.

When it is caused by wet feet, let them be well rubbed, and then immersed for some time in hot water: a warm purge with rhubarb, or tincture of fenna, may be given, to the quantity of two, or three ounces, and be repeated, if stools are not soon procured.

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In the mean time, if the pain be very acure, glysters of a decoction of chamomile flowers, with a few aniseeds boiled therein, may be thrown up, with three, or four spoonfuls of oil, and one of salt. If the belly be tense, and in great pain, it may be fomented with hot water alone, or with any warm herbs boiled in it; and plenty of chamomile tea should be suct down hot: the castor oil may be given, as above directed, and the belly wrapt up in warm flannels.

If the pains are not relieved by stools, opiates then may be safely given; and the preference may be given to those of the warm, carminative kind, as a scruple of *London Philonium*, or two of mithridate.

In the hysteric, or spasmodic colic, the body must be opened by laxative glysters, in which a dram, or two, of asa-fœtida may be added; and an ounce or two, of tincture of rhubarb may be given, with a dram, or more of the aromatic, or foetid tincture.

If violent vomitings attend, the saline draughts with pepper mint water must be frequently given, with five, six, or more drops of liquid laudatum; but if the vomiting is not to be thus controuled; six-ounces of water with fifty,



## 200 *Colics from Indigestion, and Irritation.*

sixty, or eighty of the above drops, must be thrown up by glyster.

Dr. *Whyt* says, when no thorough passage could be procured, by favour of this opiate; he gave some pills of aloes with calomel, which procured plentiful evacuations by stool, which removed the disorder: proper forms of this kind will be given in the subsequent Chapters.



## C H A P. XXXVII.

### *Colics from Indigestion, and Irritation.*

**T**HIS kind of colic may be known, by the irritation and pain being more general; by a load, sickness, and weight at the stomach, with frequent efforts to vomit.

As this disorder is caused by putrid, indigested matter, passing from the stomach into the bowels; the first intention must be to cut off fresh supplies, by giving a vomit; and diluting the foul contents, by drinking plentifully of chamomile tea.

The humours then are to be pushed forwards through the bowels, by giving twenty  
grains

*Colics from Indigestion, and Irritation.* 201

grains of rhubarb, and as much cream of tartar, every half hour, 'till they operate; or the purge N<sup>o</sup>. v. and vi. may be given for that purpose.

If the contents evacuated prove acrid, and sharp, they must be diluted well, by drinking *plentifully* of soft gruels, or small broths; even plenty of toast and water might be given for this purpose: after proper stools have been procured, the bowels may be quieted by any gentle opiate.

To prevent future attacks, the stomach should be strengthened by proper medicines: for this purpose, rhubarb may be chewed, or taken daily for some time, to the quantity of five, or six grains, with the same quantity of nutmeg, or ginger; a spoonful or two of hiera picra tincture, or ten grains of *Ruffus's* pill, may also be given every day; when the following wine may be taken for a month. Infuse an ounce of rhubarb sliced, and half an ounce of bark, with two drams of Cardamon seeds in a quart of good white wine, for a week; then pour off the clear, and take a wine glass daily; a seville orange toasted, may be added, to make it more grateful.



## C H A P. XXXVIII.

*The Inflammatory Colic; or Inflammation of the Bowels.*

**T**HIS disorder comes on with a pain in the belly, which by degrees becomes more violent: a burning, or pricking pain is felt throughout the whole region, which becomes tense and hard, so that it can't be handled without an augmentation of it; the pulse is quick, and hard, though not so much, as in other inflammations: the countenance is flushed; the thirst is excessive; little urine is made, and that is high coloured; the belly is generally costive, though sometimes there is a purging, attended also with vomiting: if the inflammation is not soon checked, the guts become gangrened.

This disorder must be treated as inflammations in general, by copious bleedings, boldly repeated; though the feel of the pulse may not seem to demand them. Emollient glysters, prepared by a decoction of mallows, or barley, with oil, should be thrown up, as fast as they are rejected; or every hour, by means of a

strong



strong glyster syringe: and as stools are found to be greatly efficacious in relieving this complaint, the most gentle, and cooling physic must be made use of; as a solution of manna, salts, soluble tartar, cassia, tamarinds, and such like in barley water; for no strong, or stimulating physic, must, if possible be given.

To assuage the thirst, and cool the inflamed bowels, plenty of barley water, almond emulsion, linseed, or mallow infusion, with nitre dissolved in them, should be liberally taken.

The belly should be kept constantly fomented with flannels dipt in hot water; and, if the pain is not relieved by these means, the patient should be put into a bathing tub of warm water, and kept there some time; and a spoonful of castor oil may be given every hour, 'till stools are obtained.

The bleeding, glysters, and cooling physic, with the warm bath, must be alternately repeated, 'till the pains are abated, and stools are procured.

But if the bowels do not relax, and the opening physic is rejected by vomiting; it must be given in a solid form; thus half a dram  
of

of the purging extract, with ten grains of calomel, and a grain and a half of opium, may be made into six pills; two of which may be given every hour, with the purging infusion intermediately by spoonfuls, or a solution of the purging salts, 'till that end is obtained.

After this complaint is removed, oily draughts with manna, should be continued for some days, to supple the tender bowels, and prevent a relapse; which the least trespass in diet, or other irregularity, too frequently occasions.

We have omitted some remedies here; which, to prevent repetition, we shall insert in the next Chapter.



## C H A P. XXXIX.

*The Bilious Colic.*

**T**HIS cruel disorder is attended with very acute pains about the region of the navel, and more, or less of a fever: the pains sometimes abate, but return again with great violence, and contract into one point, as if the belly was boring with an augur: the inward heat, and thirst are considerable; a hot, bitter, yellow

yellow bile, is frequently discharged by vomiting, but without relief: the body is obstinately costive, and the peristaltic motion of the guts is inverted, if seasonable assistance is not soon given.

This disease admits of a speedy remedy, or none; for it terminates in an iliac passion, or mortification of the bowels very soon: so that the smallest error may be of the utmost consequence. After a copious bleeding, or two, the method of relieving the symptoms, is by fomenting, and relaxing the bowels, by emollient tepid liquors, both taken by the mouth, and injected hourly by glysters: these may be prepared with barley, or mallow decoction, whey, warm water, or the smallest chicken broth; and given both ways, in considerable quantities.

To these liquors, the juice of lemon may be added; for want of which a little vinegar, and honey may be substituted; and a dram of cream of tartar, may be frequently given, dissolved therein; or a spoonful of castor oil every hour, 'till stools are procured.

When the bile has thus been well diluted, and the stomach will retain a medicine; the gentle purges in the preceeding Chapter may be



be given; or the mixtures N<sup>o</sup>. v. vi, taken by spoonfuls, as the stomach will retain them.

**Fomentations**, and warm baths, are to be used also, as there directed; and if the bowels prove obstinately costive, and yield not to the fumes of a tobacco glyster, the purging pills with opium must be given as there directed, with, or without the calomel.

When the bowels have been thoroughly emptied, twenty, or thirty drops of laudanum may be given, to recruit the patients spirits; which must sometimes also be given to mitigate the pain, while diluting, and opening medicines are doing their office.



## C H A P. XL.

### *The Iliac Passion.*

**I**F the above methods are not attended with success, the order of the bowels will be inverted; nothing can pass them, and the vomitings are incessant: the pain is so intense, as to occasion hiccups, delirium, feeble pulse, coldness of the extremities, clammy sweats, and death.

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This deplorable malady, too often baffles the skill of the most able, and experienced, as the causes are sometimes inscrutable, till dissections after death, have discovered them. Medical histories have informed us, that a kind of membranous bridle, or ligature has been found, surrounding the guts, from the mesentery; which have formed a stricture thereon like a cord, so that nothing could pass them; schirrous swellings, either of the coats of the guts, or pressing thereon, have also effectually shut up the passage; and obstinate constipations from indurated feces, walnuts, &c. plugging up the intestines, have often produced this disorder: so that the utmost attention should be paid to the original symptoms, that produce the obstruction.

Thus when inflammation of the bowels is the cause, its progress is rapid, from the acuteness of the fever, and the violence of the pain, and vomitings; and must be briskly attacked by the method we have already laid down; viz. repeated bleeding, warm baths, and lenient purges: But when it arises from an obstinate costiveness, or indurated bodies lodged in the guts; as the symptoms are more gradual, and the danger more remote, so the treatment must be different; by giving brisk purges to exonerate  
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the intestines, after having softened the faeces by saline medicines: the common purging salts, dissolved in mint, or spring water, have been found very effectual for this purpose, as well as in obstructions of the bowels from ruptures: they may therefore be first tried, and given as above related in general Chap. on colics.

We shall insert the following glyster, as it has its advocates, in obstinate adstrictions of the bowels: boil half an ounce of fenna, and a dram of *Virginia* tobacco, in a pint of water gruel, or mallow decoction, to ten ounces: add two ounces of honey, and tincture of fenna, and a dram of oil of aniseed. It is said to cause also a smart sickness, and vomiting; two, or three drams of the best tobacco, boiled in water gruel might answer this intention.

Quicksilver has often been given on these occasions, in hopes of forcing a passage by its weight; but it is much to be feared, that it often hastens the mortification, by lodging in the bag, formed by the gut, over that part, where the spasm, or stricture is made; as the mercury, on dissection, is always found lodged in this bag: on this representation of stricture on the gut, should it not seem, more eligible, to lay the stress of the cure, on large quantities of oil, particularly that of castor, taken  
both



both ways, plentiful bleedings, warm baths, opiates, and lenient purges, with tartar of vitriol, than quicksilver, and stimulating purges? *Town's* method of treating the dry belly ach, in the next Chapter, by beginning with an opiate to controul the spasm, seems a more preferable plan.

The volvulus, intussusception, invagination, or passing of one gut into another, do happen sometimes: but when that is the case, it generally proves mortal, as the stricture produces a gangrene: some strange cases are recorded, of large separations of the strangled gut; but the recovery of such patients, seems, rather to be of a miraculous nature: the memoirs of the *French* academy of surgery, furnish us with many instances of this kind: and indeed, they deal too largely, now and then, in these marvellous stories.

In the *Scotch* medical essays, there are recorded some extraordinary cases; where obstinate costivenesses, which had resisted, all other methods, were removed, by dashing cold water for some time, on the patients thighs, and legs: thus throwing the *materia perspirabilis* on the bowels, and softning the hard fœces.

210 *The Nervous Colic, or dry Belly Ach.*

Blisters are recommended, to be applied over the stricture, on the pained part. Emollient poultices are also advised for this purpose, and cupping glasses, with scarification.

The castor oil is strongly recommended in this deplorable malady, and may be given according to the directions above laid down, both by mouth and glyster.



C H A P. XLI.

*The Nervous Colic, or dry Belly Ach.*

**T**HIS is a most cruel disease, very common in the *Leeward* Islands, and peculiar to Miners, and those Mechanics, who deal much in lead: Some of our cyder countries, are said also to be much affected with this complaint, in consequence of the lead made use of, in lining their tuns, and of the sugar of lead used, in fining this liquor.

The symptoms are an intolerable piercing pain, in different parts of the bowels: In a short time it is more diffused, and then seems, as if all the bowels were contracted to a point; the belly is obstinately costive, very little urine is made, and the strength becomes greatly impaired; the extream parts grow cold, and the patient

*The Nervous Colic, or dry Belly Ach.* 211

patient falls into clammy sweats, and swoonings; 'till he sinks under the agony of his afflictions. A tingling uneasiness is often felt through the spinal marrow, which being communicated to the nerves of the arms, and legs, terminates often in a confirmed palsy.

The first intention, is to remove the constipation of the bowels, and solicit them to discharge: for this purpose, gentle purges should be given, in liquid forms, or castor oil, and frequently repeated, 'till they slide through the bowels, and procure stools. But in order to remove the spasmodic affections of the bowels, a gentle opiate is, by some thought necessary to be given, before the opening medicines: thus, an hour after ten grains of the soap pill have been given, half an ounce of manna, and two drams of cream of tartar, may be taken every three hours in warm gruel, 'till the body is opened: some give a dram of tartar of vitriol, with ten grains of salt of tartar for this purpose.

Oily glysters should be injected every four hours, and warm fomentations should be incessantly applied all over the belly, with double flannel: if a warm bath can be procured, impregnated with the warm aromatic herbs, as lavender, rosemary, chamomile, &c. it might be more advantageous.



## 212 *The Nervous Colic, or dry Belly Ach.*

When the pains begin to be mitigated, and the body is somewhat open, purges of greater efficacy are directed; as a scruple of the purging extract, and the same quantity of calomel: this is directed by *Town*, to be taken in the morning, and repeated daily, 'till the pains are removed, and the bowels become soluble. Instead of opiates, which are to be taken only on emergencies, two scruples of balsam of Peru must be given, in any form most agreeable, every six hours.

Where the stomach will bear *Barbadoes* tar, it is more efficacious than the former; two drams of which should be taken thrice a day, 'till the distemper is totally vanquished. Nor is there a better remedy for external use, in the tingling along the spinal marrow, or numbness, and inability of limbs; than chafing the whole length of the Vertebrae, as well as the limbs, with this tar, mixed with an equal, or double quantity of double distilled rum. If these succeed not, the bath, and *Bath* waters must be taken inwardly, and applied to the affected parts by bathing and pumping.

When a warm bath can be procured, impregnated with the warm aromatic herbs, as lavender, rosemary, chamomile, &c. it might be more advantageous.

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## C H A P. XLII.

*The Cholera Morbus, or Bilious vomiting and purging.*

**T**HIS disorder, is a violent bilious discharge both upwards, and downwards; it is very common in the summer, and arises from acrimonious bile, thrown out of the liver, and gall bladder, into the duodenum, or first gut; part of which regurgitating into the stomach, will excite a fever, sickness, and vomiting of bilious matter; the remainder being determined to the bowels, will bring on purging, with great pain, inflation, and distension of the belly; they are frequently also attended with severe cramps, in the legs, thighs, or arms; and the patient is often destroyed in twenty-four hours.

The intentions of cure, consist in plentiful dilution of, and expelling the acrid bile, and in palliating the most urgent symptoms, with opiates.

This is to be effected after bleeding, by taking in gallons of small liquors, both by mouth, and anus: small chicken broth, gruel, whey, warm water tinged like coffee, with toasted bread, are proper for this purpose:

they should be incessantly taken, in order to dilute, and discharge the acrid, irritating cause from the bowels.

This treatment will sometimes take up three, or four hours; when opiates may be given, to recruit the spirits, and controul the pains: should they return with violence, the patient should be put into a warm bath, and continue there for some time; and to expel the acrid matter, gentle purgatives should be given; as manna, and cream of tartar, in the diluting drinks; and when the stomach will bear them, the solutions N<sup>o</sup>. v. vi. or rhubarb joined with opiates, or philonium, mithridate, &c.

The saline draughts with the cordial confection, may now also be taken every four hours, with a few drops of liquid laudanum; and when the warm bath is not used, fomentations should be applied externally.

On the first attack of this distemper, all vomits, and purges are to be avoided, as the most gentle are pernicious on this occasion: the whole stress of the cure depends on plentiful dilution both ways; and gentle physic afterwards: with occasional cordials, and opiates, to support the patients exhausted spirits, and to gain a truce with the violent pain; and these must sometimes be repeated in full doses.

Excessive



Excessive vomitings, and long continued sickness from other causes, which irritate the nerves of the stomach, can sometimes only be removed, by washing it well with gallons of chicken water; which must be continued, 'till the acrid, offending matter is removed, or thoroughly diluted.



C H A P. XLIII.

*The Nephritis, and Stone Colic.*

**T**HE *Nephritis* is an inflammation of the kidneys, attended with intense pain, and a small discharge of thin, aqueous urine. It should be treated as an inflammation in any other part, by repeated bleedings; cooling purges; emollient glysters with nitre; soft oily medicines, and emulsions; avoiding, as greatly mischievous, all the sharper diuretics, or whatever can add to the acrimony of the urine; as it would irritate the pained parts, and aggravate the inflammation.

If a suppuration should happen, and an ulcer ensue; which will be discovered, by the matter discharged with the urine; the soft diluting liquors should be continued, and detergent

216 *The Nephritis, and Stone Colic.*

balsamic remedies constantly used ; as rhubarb joined with turpentine, or balsam of copivi ; and finally the decoction of bark alone, or with Paraira Brava.

It may be of some use to observe, that matter discharged from the bladder, is much more tenacious, and glutinous, and directly subsides, like slime to the bottom of the urinal ; but matter from the kidneys, appears more loose, and fluctuating.

The stone colic is discovered, by a fixt pain in the region of the loins, which extends to the side of the belly ; with a numbness on the side of the part affected : it is generally attended with sickness, and vomiting ; the pain becomes more acute, as the stone, or gravel passes through the ureters, to the bladder ; and is more, or less so, according to the size, and figure of them.

The indications of relief, are to evacuate the gravelly matter, lodged in the pelvis of the kidneys ; or in the ureters, which convey the urine, from the kidneys to the bladder : these are effected by bleeding, to remove the tension, and inflammation ; by gentle physic and emollient glysters, to unload the bowels, and

and take off their pressure on the ureters; which at the same time foment, and relax the contractions, and spasms, excited by the painful passage of the stone or gravel; by warm baths externally, the same effect is produced, by a general relaxation; by soft emollient drinks with nitre, the discharge of urine is promoted; while anodines suspend the pain, and take of the spasmodic contractions of the ureters.

To obtain these views, after bleeding, give an opening apozem, with an ounce of manna, and salts, dissolved in a pint or more of water: or the purging draught, N°. vi. may be taken for this purpose; and the glysters may be prepared with mallow decoction, or water gruel, four spoonfuls of oil, and one of honey; and these should be frequently injected, to act as a fomentation to the parts within: half an ounce of *Venice* turpentine, broke with the yolk of an egg, is sometimes added; and when the pain continues violent, two, or three grains of opium may be dissolved in them, or a dram of Thebaic tincture:

As the vomiting is an effort of nature, to push on the obstructed gravel, through the ureters; it should only be kept within bounds, by the saline draughts, and diuretic salt, taken intermediately; while plenty of such soft liquors,



218 *The Nephritis, and Stone Colic.*

quors, as a decoction of marshmallows, parsley roots, linseed, barley, and such like, should be drank liberally, with nitre, and honey; to which a little white wine, or a spoonful of rum may occasionally be added, when the stomach is palled: and where oil is not disagreeable, a spoonful, or two, may be taken now, and then, to advantage, in the above drinks.

No hot, forcing diuretics, as gin, turpentine, leeks, onions, &c. should by any means be given, as they would aggravate the disorder, by increasing, or causing inflammation.

If the above methods do not succeed, the warm bath should be used; and if the pain, and spasms continue; after proper evacuations, twenty, or thirty drops of Thebaic tincture; or ten, or fifteen grains of the soap pill, should be given; which frequently, by relaxing the parts, promotes the expulsion of the gravel: when these opiates are rejected by vomit, they must be given by glyster, in a triple proportion; in which way, they generally succeed best.

When stones, or gravel, are lodged, and strongly fixed in the ureters; jolting exercise is sometimes absolutely necessary, to push them forward; a sedan chair may first be tried; which,

which, if not successful, must be exchanged for a rougher vehicle.

To prevent future fits, in those who are constitutionally subject to gravelly concretions; a dram or two of castile soap, should frequently be taken, for a fortnight, or longer; or a pint, or more of oyster shell lime water daily: some for this purpose, take a tea spoonful of soap lees, or the lixivate drops, in the appendix, every morning, in a pint of milk, or whey; fasting an hour, or two after: in short, unless we knew, what diet, or medicine, would prevent the regeneration of this fabulous matter in the kidneys; some of the above medicines should often be taken; especially on the least alarm of pain in the back; to prevent the accretion of these particles, before they become too large to pass the ureters.

A decoction of the root, called Pareira Brava, is much extolled by some for this purpose, and for discharging gravel, and sand with the urine. It is supposed to effect this, by dissolving the viscid mucus, by which the fabulous matter has been detained; calomel is also given for this intention.

The root may be given in substance, to the quantity of a scruple, or half a dram, in a draught of any soft vehicle, twice, or thrice a day;  
or

or in decoction, by boiling two, or three drams, in a quart of water, to a pint and a half; and when made palatable with honey, or sugar; half a pint, or more, may be taken twice, or thrice a day. It may be prepared stronger, or weaker, as it is found to agree with different stomachs.



## C H A P. XLIV.

*Suppressions of Urine.*

**I**T is sometimes difficult to judge of the cause; or to be able to determine exactly, the seat of this disorder: but as too hot, and forcing diuretics, are often made use of, very improperly on all these occasions, we shall endeavour to point out the safest method of treating it in its different stages.

When it proceeds from *inflammation in the kidneys*, which is known by the heat, and pain in that region, attended with fever, and high coloured urine, plentiful bleeding is absolutely necessary, with cooling purges, or salts, and manna; soft emulsions with nitre, or diuretic salt, should be drank liberally; and emollient glysters with the same, should frequently be thrown up: all hot medicines should be avoided, as most pernicious.

When



When it arises from *stones, and gravel passing from the kidneys through the ureters*, to the bladder, and blocking up those channels; which is known by pains in the sides of the belly, vomiting, &c. Consult the Chapter on stone colic. p. 216-17.

When from *inflammation on the neck of the bladder*, which is known by a swelling, and pain in perinæo, on touching; and when the urethra is so tender, as not to suffer the catheter to pass, no time is to be lost: plentiful, and brisk bleedings, to the amount of thirty, or forty ounces of blood, or more, should be used, and in a small space of time, viz. twenty-four hours; during which time, the body should be purged with salts, and opening glysters: warm baths should also be used, and bladders of bran and water, or linseed poultices should be applied to the perinæum. Emulsions, and barley water, with nitre, or its sweet spirit, should be the principal drink. If this method succeeds not in twenty-four hours, the bladder must be opened by an able surgeon, before a mortification ensues.

It is very essential to observe, that in all inflammations of the bladder, and its neck; no attempt should be made to pass the catheter,

theter, 'till plentiful bleedings; the warm baths; cooling purges; and oil, opium, and warm water; have been repeatedly thrown up *per anum*: for 'till the inflammation is abated by these means, it will be increased, by the irritation, produced by the catheter passing through the narrow, and tender passage; and every symptom will be aggravated thereby.

Spasmodic disorders of the neck of the bladder, are sometimes attended with every symptom of a urinary retention, and yet, there shall be found little, or no water therein; as evidently appears on passing the catheter, to relieve this complaint; bleeding, warm bathing, and the above oily opiate glysters, are the principal remedies.

When an obstruction in making water, arises from the mucus of the urethra being thickened, and plugging up the passage; warm water forceably injected, will frequently dissolve, and bring it away. But when this canal is blocked up with caruncles, or excrescencies, they must be suppressed by the frequent pressure of well formed bougies.

Fungous swellings, and schirrosity formed on the neck of the bladder, with a thickning of its internal coat, sometimes produce very  
uneasy

uneasy sensations in making water; the urine being voided guttatim, and the symptoms similar to those of a stone in the bladder; these complaints are scarce ever permanently removed: mercurial frictions are most promising; and the uva ursi, is recommended by some; but too often we must be content with mucilaginous drinks of gum arabic, linseed, and marsh-mallow decoctions, to render the urine soft and less irritating; with the oily opiate glysters intermediately.

The strangury arising from blisters, and other irritations, is relieved by drinking plentifully of the above drinks, milk and water, almond emulsion, or barley water; to which the camphor julep, and nitre may be added, when the stomach can bear them. Warm oil injected into the urethra, and bladder, will also be useful, to defend the parts from the acrimony of the urine, and the salts of the cantharides.

When a stoppage of urine is occasioned by a stone lodged in the neck of the bladder; abstain from all forcing, and irritating medicines; and if, by raising the buttocks high, or even inverting the position of the body, the stone cannot be dislodged, recourse must be



be had to the skilful hand of a surgeon, to remove it by the staff, or catheter.

If it arises from the pressure of indurated fœces on the neck of the bladder, emollient glysters, with salt, or soap, should be thrown up, 'till they are softened, and brought away.

If from palsy, on the neck of the bladder, let the belly, above the os pubis, be well fomented with a decoction of any of the warm herbs, as lavender, chamomile, bay leaves, wormwood, rosemary, &c. If this succeeds not, the herbs beat in a mortar, and put into a bag, may be applied, and repeated often; or an ox's bladder, half filled with the decoction, may be applied in the same manner, wrapt up in a piece of cloth, or flannel: finally, *Spanish* onions, boiled to a pulp, may be applied by way of poultice, 'till the catheter can be passed; which should be done twice a day, 'till the sphincter recovers its tone; which will be greatly assisted by the use of the bark.

When the proper passage of the urine is intercepted, by a defect of the secretion, in the kidneys; stimulating diuretics, as cantharides, and camphor, often succeed; but they must be cautiously repeated, least they occasion inflammation; to prevent which, nitre should  
be

be joined with them. The Paiara Brava decoction is used for this purpose.

Mr. *Boyle* recommends, on these occasions, two spoonfuls of the juice of onions, mixed in half a pint of white wine.—Others to half the quantity of wine, add an ounce of lemon juice, and two drams of spirit of turpentine.—A dram also of balsam of copivi, broke with the yolk of an egg, to which four ounces of barley water, and white wine is added, may be given also to answer this intention; and repeated in a few hours, if found not, too heating: but these hot medicines should be given with caution.

Pregnant women are frequently subject to suppressions of urine, from the gravitation, and pressure of the foetus on the neck of the bladder, in the early months of gestation. In these cases, to remove the fulness of the uterine vessels, repeated bleedings in small quantities are necessary; a supine posture also; and suspensory bandage, to support the abdomen are proper, to take off the pressure of the intestines on the womb: if these means do not succeed, the catheter must be passed twice a day, to draw off the water: in general, as the child rises up out of the pelvis, this complaint is removed; if not, a proper pessary may be introduced, should the bandage not be successful.

## C H A P. XLV.

*Of Diabetes, or profusion of Urine.*

**A** Diabetes is a profusion of sweet urine, attended with a general wasting of the whole body, and inextinguishable thirst.

The cure depends on correcting the blood and juices, and strengthening the relaxed kidneys; and by that means restraining their preternaturally increased secretion.

Strengthening, and restringent medicines in general, are recommended, as the bark, steel, alum, &c. a strong posset, or whey prepared with this latter, and drank of plentifully, has been found of great service, viz. three drams of alum boiled in a quart of milk, and taken to a quarter of a pint thrice in a day.

Some direct a dram of tincture of lead, to be taken thrice a day in lime water: others mix equal parts of the tincture of japan, and that of *Spanish flies*, and give them in large quantities. *Morgan* prepares his tincture of cantharides, by infusing half an ounce of the powdered flies, in a pint of elixir of vitriol; the



*Diabetes, or profusion of Urine.* 227

the dose from fifteen, to forty drops, twice, or thrice a day in *Bristol* water; the latter may be given alone in *Spaw*, *Piermont*, or *Tunbridge* waters.

If costiveness should ensue the taking of these medicines, the bowels should be kept open by rhubarb, or other gentle purges.

If this method should not succeed, recourse must be had to the *Bristol* hot well water; which often effects a cure, when all other means prove ineffectual.

*Incontinence of urine*, may arise from various causes, as a paralysis, or impaired tone of the neck of the bladder, from various injuries, and the extraction of a stone after cutting. The bark, valerian, and other such corroborants, with the cold bath, are principally to be depended on, with the *Yoke* wore on the penis.

When this disorder arises from a paralysis of the nerves, which actuate the muscles of the bladder, a large blister applied on the os sacrum, and kept open for some time, has frequently removed this complaint: the above corroborants are proper to confirm the cure.

## C H A P. XLVI.

*The Jaundice.*

**T**HIS disorder manifests itself by the following symptoms. A yellowness of the whole body, most visible in the whites of the eyes; a seeming yellowness of all objects; an itching in the skin; a heavyness, and lassitude; bitterness of the tongue, attended sometimes with bilious vomitings; the excrement is white, or clay coloured; the urine of a saffron complexion, staining linnen dipt therein yellow.

The cause in general, is owing to an impeded influx of the bile, into the duodenum, and an absorption of it into the circulation; by which means the serous part of the blood becomes tinged therewith; which shews itself in the most pellucid parts, as the eye, &c; the urine becomes of a saffron colour, from being loaded with the bilious salts; and the fœces appear white, from a defect of bile in the intestines to tinge them.

This impediment to the natural secretion of the bile, is occasioned by a variety of circumstances; as an inflammation, and schirrus  
of

of the liver; spasms of the biliary vessels; concreted bile, and gall stones; and a too viscid state of the bile itself.

The cure must depend on the causes producing the jaundice; when it arises from inflammation, and is attended with fever, which is known by the fulness of the pulse; the heat of the skin; the drought, and tenderness of the right side below the ribs; bleeding, cooling physic, nitre, and other saline medicines should be first given, as in other inflammations.

For this purpose, the purges N<sup>o</sup>. v. vi. may be taken every other day; or thirty grains of rhubarb, with a dram, or two, of soluble tartar: The cooling drinks with nitre, and the saline mixture, may be given liberally, till the fever is removed; and both belly, and stomach, may be fomented with flannels, dipt in any warm emollient decoction: in case of violent pain, a few drops of Thebaic tincture may be given, and occasionally repeated, every four, or six hours, in the saline mixture.

When the pain, and fever is removed, a vomit should be given in the evening, and the next day, the above rhubarb purge; after-



wards, three parts of soap, and one of rhubarb, should be given in such quantities, as will keep the body open; washed down with three, or four spoonfuls of the saline mixture, or half an ounce of the diuretic salt, dissolved in a pint of any simple water: the vomit, and purge, may be occasionally repeated, as indications require.

When the jaundice arises from viscid particles of bile, locking, and damming up the vessels of the liver, which is indeed the most frequent cause; besides the above general method, the purges should be of the warmer kind, as tincture of rhubarb, or the aloetic wine; the vomits should be antimonial, and mercury joined to the physic, will frequently render it more efficacious: to the pills, may be added, an eighth part of gum ammoniac, or calcined antimony; which may be washed down with a decoction of madder, made by boiling an ounce, with two drams of mace, in three pints of water to a quart. *Sydenham's* decoction of madder, and turmeric, may be given also for this purpose.

This is the general, and most successful method of treating jaundices, arising from viscid fluids, and concremented bile; to which squill medicines

medicines may be joined, as in N<sup>o</sup>. xxviii, or a tea spoonful of oxymel squills may be given thrice a day, if the stomach will bear them, without much sickness, in the above decoctions, or saline mixtures: volatile salts alone, or joined with nitre, are sometimes more attenuating than the neutral, and may be given in the same manner.

In violent spasmodic pains, recourse must be had to opium, to relax the contracted vessels; with warm fomentations to the pained part; the application of bladders filled with the same, or flannels dipt in *Bates's* anodine balsam, have their use. When the jaundice arises from con- creted bile, and gall stones plugging up the passage of the gaul to the bowels, and ob- stinately resist, the power of medicine; a long perseverance in a free use of soap, to the quan- tity of an ounce daily, and a decoction of grass, dandelion, fumaria, succory, and such like roots, with sal polychrest dissolved therein, viz. an ounce to a pint is advised; and hath cured a black jaundice, by bringing away stones, and grumous calculous concretions, with granulated matter of the colour of clay.

Vomits are often found effectual in dislodg- ing these stones, and when taken, after coming out of a warm bath, they are thought to

operate with more advantage; those of the antimonial kind are to be preferred.

As the bile sometimes offends, by its too great tenacity, so also, sometimes by its being too rare, or thin: in this latter case, it is thrown off by violent purgings, which must not be stopt, but restrained, with proper doses of rhubarb, and opiates; and this state of it should be corrected, and amended, with salt of wormwood and lemon juice draughts, prepared, with small cinnamon water; and a decoction of hemp seed boiled in milk, viz. till it breaks: the dose may be a quarter of a pint, twice, or thrice a day: in this state of the blood, and when the jaundice is attended with a discharge of blood, or petechial, livid marks on the skin; it denotes an acrimonious, dissolved state of it; when all attenuant, aloetic, volatile, or steel medicines, should be avoided as poisons; and their place be supplied with soft demulcents, and the mineral waters of spaw, piermont, or bath, with elixir of vitriol, and other acids.

It would be of considerable use, to rub the right side, night, and morning, for a quarter of an hour, with flannel, or a soft flesh brush; and proper attention should be had to diet, that it consists not of viscid, glutinous, and heavy food;



food, but rather of light, thin broths, wherein sorrel, lettuce, parsley, endive, or sweet fucus, are boiled.

When the obstructions are removed, and the skin, and excrement recover their proper colour, the bitter infusion, N<sup>o</sup>. xx. with, or without steel, and vitriol drops, may be taken twice a day, to mend the bile, and strengthen the constitution: for this purpose also, the above mineral, Bath, and Tunbridge waters, may be drank to great advantage.

We shall close this Chapter, with observing that in some bilious habits, a slow fever, attended with lassitude, nausea, and bitter taste in the mouth, frequently invades such people; their eyes, and urine, being sometimes lightly tinged with a yellow complexion.

If they are of a full habit, blood should be taken away; and a vomit be given, to which two, or three grains of tartar emetic, may be added. The bowels should be kept open, by giving every other day, a rhubarb purge with soluble tartar; or for this purpose, the castor oil alone may be taken, and repeated occasionally.

The saline draughts may be given immediately, thrice a day; either alone, or with a quarter,

a quarter, or half a grain of tartar emetic joined with them, if it sits easy on the stomach: a fourth part of *James's* powder also, with three, or four grains of rhubarb, may be given, to answer this purpose, every night going to bed; continuing the daily use of the saline draughts.

This method, occasionally varying the medicines, scarce ever fails of removing this complaint, especially, if assisted by a country air, a due degree of exercise on horseback, and a temperate diet, with spaw, or Piermont waters.



## CHAP. XLVII.

### *The Dropsy.*

**T**HERE are two different species of dropsy; one where the water is lodged under the skin, called *Anasarca*; the other, where it is detained in the duplicature of the peritoneum, or in the cavity of the abdomen, called *Ascites*; there are also partial dropsies of the chest, called *Empiema*; of the testis, called *Hydrocele*; of the head, called *Hydrocephalus*; of the ovary, *Hydrops Ovarii*, &c.

The

The swelling generally begins in the inferior parts, and gains insensibly the whole body: the eyes are languid, the face and body fallow, and bloated; the urine is made in small quantities, and high coloured; the patient never sweats; the parts on pressure pit; and the thighs, and feet are always cold.

The indications of cure consist in evacuating the waters effused in the several cavities; and in preventing a relapse, by strengthening the solids of the body, and the habit in general.

The waters are to be discharged by the natural excretions, as vomit, stools, urine, or sweat; or by the artificial, as tapping, scarification, and blisters.

When this disorder arises from a weak, and relaxed state of vessels, or an impoverished state of blood; evacuations by purges seem unnecessary: a restorative diet being here more proper, with such medicines as will strengthen the constitution in general; as the bitter kinds with steel, and the different preparations of the bark. *Vide N<sup>o</sup>. xvi. xx.*

Where the viscera are found, vomits have been found very effectual, in discharging the water: Sydenham cured many, by giving an ounce and a half of the antimonial wine every day:



day: the same effect has been produced by giving two, or three grains of tartar emetic, and twelve of ipecacuanha every day, for a fortnight, and every other day for a week longer: a cordial opiate should be given after the operation.

Brisk, stimulating purges, are often very usefully employed, to carry off the water; if this point is obtained by them, they should be frequently repeated; but, if they procure not the expected relief, they must be laid aside: the powder N<sup>o</sup>. xi. may be given for this purpose three times a week, or elaterium, to six, or seven grains. As *diuretic* medicines are of great use, in sending off the water by the kidneys; it is pity their operation is not more to be depended on: however, as there are a variety of them, they should be tried round, 'till *that* adapted to the constitution is hit on.

With some, the squills will succeed well; with others the diuretic, and lixivate salts; salt of amber; tincture of cantharides; and that of the filings of copper, extracted by infusing ten grains, in six drams of the volatile aromatic spirit, and giving from twenty, to sixty drops, thrice a day, on an empty stomach;

stomach; in a little honey, or balsamic syrup. But it may be necessary to observe, that warm, stimulating, aromatic medicines, should be joined with *diuretics*, as horse-radish, mustard seed, arum root, &c. in order to promote the absorption of the extravasated fluids, and determine them to the kidneys.

The *squills*, which are in general, efficacious in promoting urine, may be given in substance, from five, to ten grains, for a dose; to which any aromatic may be joined, to reconcile them to the stomach, and should be given thrice a day: the oxymel, or squill wine may be given in the same manner, to the quantity of a tea spoonful, or more, in a cup of the saline mixture, N°. ix. x; or half a pint of the diuretic ale, N°. xviii.

The saline medicines, as salt of tartar, wormwood, pearl ashes, or those from burnt broom, may be given with the above, to the quantity of half a dram for a dose; or be added to the bitter infusion: or a proper quantity, *viz.* two ounces or more of broom ashes, may be infused in a quart of wine, or cyder, with half an ounce of gentian, and when filtered, given to the quantity of four ounces three times a day, when a cheap medicine is desired.

When

When there is reason to believe, that the dropsy arises from obstructions of the liver, spleen, or their lymphatic vessels, ten grains of calomel should be joined to the purge, in order to resolve them, before corroborants are made use of; and, in general, these last medicines should be interposed, to brace up the relaxed vessels, and restore their elasticity; or the attempts to cure by evacuations only, will often be fruitless.

The bitter infusion, or decoction of the bark, animated with winters bark, snakeroot, &c. may be given daily for this purpose, to the quantity of half a pint; to which also may be joined the diuretic salt, or chalybeate wine.

As medical history records, strange cures effected by unexpected methods, we shall insert some few of those remedies, that have some times been given with success; thus, a spoonful of the juice of artichoke leaves, has daily been given in white wine, with remarkable success; in some strong, robust constitutions. The inner rind of fresh dwarf elder, boiled in spring water, to make it exceeding bitter, and given to half a pint daily, on a fasting stomach, operates powerfully by vomit, stool, and urine: nor must we omit the remedy re-  
corded



corded by Dr. Mead, where the worst species of this disorder was cured by a spoonful of mustard seed, taken night, and morning, and washed down with half a pint of a decoction of broom tops: to which we shall subjoin, and recommend, a decoction of fresh juniper twigs, and berries, to a quart of which, an ounce, or two, of broom ashes may be added; and of this, a quarter of a pint, or more, may be taken thrice a day.

Sometimes mild purges, with diuretics, will succeed better than the more violent; as a decoction of tamarinds, with manna, soluble tartar, nitre, and tincture of senna: these will sometimes operate incessantly, both by stool, and urine; and with due repetitions, produce an absolute cure.

• *Ward's*, and *Dover's* sweating powder, given to the patient laying in blankets, have sometimes proved successful remedies in this disorder, so often unintelligible, as to its cause. *Vide Appendix.*

The patient should be kept warm in the day, and well covered in the night: his food should be dry, as roast meat, or fish; his drink should

should be little: as many have been cured, by a resolute, and total abstinence from liquids: as much exercise should be used, as the strength will admit of; the swelled parts should be rubbed with flannels; and as the swelling subsides, the relaxed vessels should be strengthened by bandages, and rowlers.

When the swelled limbs do not subside, or yield to the above means, the water is frequently removed by punctures, or slight scarifications, with a lancet, above the ankles: they are best made in a crucial form, to prevent inflammation; and they should be daily fomented, to promote the discharge, and prevent mortification; blisters may be used for this purpose.

When the extravasated fluid is accumulated in the belly, so as to endanger suffocation, and the fluctuation is manifest; it should be drawn off by tapping; and the belly be properly swathed afterwards. If a cure is not often the consequence of this operation, it frequently prolongs life for some time: there have been instances of people living many years comfortably, under a constant course of tapping. Witness the following epitaph, which is here inserted for the readers curiosity.

Here

Here lies Dame MARY PAGE,  
Relict of Sir GREGORY PAGE, Baronet.  
She departed this Life, *March* IV, MDCCXXVII  
In the LVI Year of her Age.  
In LXVII Months she was tapped LXVI times;  
Had taken away CCXL Gallons of Water,  
Without ever repining at her Case;  
or ever fearing the Operation.



C H A P. XLVIII.

*The Scrofula, or Kings Evil.*

**T**HIS disease is an indolent, hard, knotty swelling of the glands, both external, and internal.

The external parts chiefly affected, are the glands of the neck, and those under the chin, the nose, and those beneath the ears; and indeed every other part, where they are most numerous, as the breasts, arm-pits, groins, &c.

The different joints, and articulations, are also the seats of this disorder; where white swellings are produced, with thickening of their membranes, and ligaments; erosion of their cartilages, and destruction of the bones;

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the



242 *The Scrofula, or Kings Evil.*

the eyes, eye-lids, and lips, are also frequently affected by this disorder.

Internally the glands of the mesentery are almost always affected; those of the lungs, spleen, womb; and in short, every other glandular part within, is equally subject to this disease; and are more dangerous, than those that are external.

We shall not enter on the supposed causes of this disorder, whether it be owing to acrimonious, saline, or viscid humours, relaxed solids, or what not; but endeavour to lay down the most approved method of treating it, from the best authorities.

Mercurial, and antimonial medicines, with the bark, and sea water, are now principally relied on for the cure, or the relief of this stubborn malady.

The mercurials should be given in small quantities; one, or two grains, every, or every other night; and be continued for some time, according to their effects, and operation; giving at the same time, half a dram of the bark, or two, or three ounces of its decoction, twice, or thrice in a day: and this course should be persevered in for some weeks.

For

*The Scrofula, or Kings Evil.* 243

For this purpose also, mercury, and antimony are united, as in *Plummer's* pill; or the golden sulphur of antimony, and calomel. The antimonial wine, and sublimate solution have also been successfully directed, in such quantities, as the stomach, and bowels will bear, without irritation.

A course of sea water, and cold bathing, has been found very efficacious in some species of this disorder; and where the former cannot readily be obtained, an ounce of *Epsom* salt, dissolved in a quart of water, may answer the same end; if given daily in such quantities as to keep the body open.

*Æthiops* mineral, millepedes, cinnabar, and burnt sponge, are frequently directed seperately, or together; but should be given in larger quantities, than they commonly are, to answer the intended purpose, viz. from a scruple, to a dram, three times a day, particularly the latter; and a few grains of rhubarb may occasionally be joined with it.

A decoction of *sarsaparilla*, with *mezereum* root, viz. three ounces of the former, and two drams of the latter, boiled in three pints of water to a quart, and given to the quantity of half a pint, three, or four times a day;

244 *The Scrofula, or Kings Evil.*

is often found to be a useful diet drink, taken alone, or with the above mentioned medicines.

One, or other of these remedies, are frequently given with success, in particular species of this malady, for we are not yet possessed of any specific medicine; and indeed, where the disease is inveterate, and confirmed, or the internal parts much affected, our best remedies will often disappoint us.

An incipient struma, or scrophulous complaint however; affecting the eye, nose, and lip; where the inflammation proves obstinate in the former, and yields not to the common treatment; where the nose is thickened, and enlarged, and the lip swelled, and cracked; will generally submit to calomel given in small quantities every night, and the bark in the day; if persevered in for some weeks: as it will also sometimes to full doses of sponge, and sea water; with the neutral salts.

The bronchocele, or swelled neck, will often prove more rebellious, and too frequently eludes our best endeavours; yet sometimes, will yield to mercurial frictions and cerates, with plenty of sponge, joined with the neutral salts, and a little rhubarb, or jalap, to keep the body open.

Very



Very alarming obstructions in the oesophagus, or gullet, from a strumous cause, have been cured when recent, by a course of mercury with purgatives; and when of long standing, by a gentle, and constant spitting procured for six weeks, by the same medicine.

The very learned, and ingenious Dr. *Munckley*, has favoured us, in the Medical Transactions, with the successful treatment of several of these deplorable cases; the manner of relating which, does as much honour to his humanity, as to his skill.

There are a few diseases that oftner baffle the skill of both physician, and surgeon, than what are called white swellings of the joints; as they often terminate in ill conditioned suppurations, corrupt the sinovia, erode the ligaments, cartilages, and bones themselves, destroying the articulation. On the early attack however, of this disease on the joints, where an ankylosis, or stiff joint is not yet formed, and no sensible collection of fluids is yet perceived; the continued use of blisters, with the bark, and calomel, have often been successfully put in practice.

The method is to cover the whole joint with a blistering plaister, and to give a grain

or two of calomel every night, with two ounces of a decoction of bark thrice a day: the blister may be kept open for a week, and then gradually lessened, to two, or three inches, on the most painful part; and this should be kept running by the blistering ointment for several weeks; the stiff tendons being bathed with neats-foot oil, twice, or thrice a day.

It may be necessary to observe, that these strumous swellings of the joint are at first, most commonly without side the bursal ligament, and joint; and in such case, topical, and attenuating applications, are extremely serviceable; as bathing with mindererus spirit; sal armoniac, and vinegar, &c. or, after fomenting with discutient fomentation, rubbing into the part the mercurial ointment: these means, with brisk physic, early applied, will often disperse these swellings, if assisted by proper bandage.

As we intend not to enter into a minute detail, of the various disorders incident to the joints from different causes; what we have already said, must suffice for the compendious view we mean to exhibit.

## C H A P. XLIX.

*Cancer.*

**T**HIS is a hard, unequal, glandular swelling, arising in any part of the body; attended with pricking, lancinating, tingling acute pains: it is often of a livid, leaden colour, with blew varicous vessels on its surface, in some sort resembling the feet of a crab, from which similitude it takes its name: when it breaks through the skin, and discharges a bloody, sanious, or ichorous foetid matter, it is called an ulcerated cancer.

This is perhaps, the most dreadful malady, to which the human body is subject; is justly called the *opprobrium medicorum*, as it bids defiance to every method yet attempted, for a radical, compleat cure. The narcotic vegetables, as night shade, and hemlock, have had their patrons: but the former seems generally forgot: and the latter is considerably fallen from its first reputation; being considered now chiefly as a palliative: in which light it is thought to be a useful remedy. *Vide* Observations on hemlock.



It is thought by some, that this medicine should be considered, and used only as an anodine, to palliate, and controul the pains; while more powerful alteratives are given, to resolve the scirrhus obstructions, and correct the acrimonious, and putrid fluids: thus, an ingenious Gentleman thinks he has given them successfully, in the following manner.

He ordered from five grains of the extract, gradually increased to half a scruple, to be taken twice a day; and three ounces of the decoction of the bark, thrice a day; and this method was successfully used in an incipient cancer of the womb, attended with stretching, tearing pains, intermixed with those of a shooting stinging nature, and a copious discharge of a greenish acrid ichor.

To this method, he sometimes joins the daily use of a quarter of a grain of sublimate; and when the pains are relieved by the use of the hemlock, he trusts to the sublimate and bark alone: this course is to be prosecuted for several weeks; and though in old inveterate cancers, it will not avail, yet in a recent state of the disease, it promises to be of much utility.

Where

Where medicines of this kind avail not, the only remedy left, is a strict milk, and vegetable diet, with a total abstinence from animal food. The hemlock may be taken as a palliative; and when the pains are very acute, a few ounces of blood may occasionally be taken away, and a gentle cooling purge be directed; when extirpation is necessary, the knife is to be preferred to the caustic, as the less painful operation.



## CHAP. L.

### *The Hydrophobia, or Bite of a Mad Dog.*

**T**HE hydrophobia, or dread of water, is a symptom frequently attendant on the bite of a mad dog; which often heals up readily; but after a few weeks there is perceived in the part, where the contagion was received, more or less pain, the wound sometimes bursting open, and discharging a bloody sanies.

The usual symptoms, are cramps, and spasms above the part bitten; restlessness, anxiety; difficulty in breathing, with rising in the throat: the pulse is weak and irregular; the sleep broken, and confused, interrupted with horrors, and frights: a frothy spittle is forcibly ejected; no liquids can be swallowed; the very attempt

attempt to which, is attended with incredible anxiety, dread, and reluctance.

Many are the boasted specifics for the cure of this dreadful malady; but the preference is now generally given to mercury, both as a preventive, and radical cure.

Immediately on the reception of the bite, if it can be safely effected, the surrounding part should be cut away, and the wound be burnt with a hot iron: but if these means are not complied with, a caustic should be applied to the part, the eschar be cut through, and a discharge should be promoted, and supported, by dressing it with præcipitate medicine for some weeks; and fomenting daily with vinegar and salt, or embrocating with sweet oil.

If these methods are not put in practice, let the bite be instantly well washed with salt and water; and into the lips, and surface about it, let one, or two drams of mercurial ointment, made with equal parts of lard, and mercury, be well rubbed; and let this quantity be repeated daily, till the mouth becomes sore, and a spitting is excited, and then discontinue it: the following is the method recommended by Dr. James, and differs from,

*De*



*De Saul's*, who anoints, and purges intermediately to prevent salivation.

‘Rub into the part where the wound was received, a dram, or more, of mercurial ointment, made by rubbing in a mortar, two parts of hogs lard, with one of crude mercury extinguished, or rather of equal parts: this should be done as soon as possible after the bite, and repeated every day for a week; but if it can be done twice a day, without salivating, it is better: the evening of the same day, let the patient take the following, *viz.* Turpeth mineral, and camphor, equal parts, from three grains to eight, in a little conserve of hips; which should be repeated the next evening but one; and again, after forty-eight hours interval. If a salivation ensues, the use of the medicine should be deferred, till that ceases; and then be resumed.’

About two, or three days after the last dose, if no accident happens, as to salivation, the patient should bathe in cold water over head, every day, till the day before the next full, or new moon, and that day let the turpeth dose be repeated for three times as before. After the third dose, let the patient bathe as before;

before ; let this method be repeated for three, or four succeeding periods of the moon.

There are others, who depend on the famous *East India* remedy, as a specific, viz. twenty-four grains of native, and the same quantity of factitious cinnabar, joined with sixteen grains of mosch, taken immediately after the bite, and repeated night, and morning for three days.

When the symptoms of infection, actually invade, warm bathing, mosch, and opium, are principally relied on by some : thus fifteen, or twenty grains of mosch may be given every six hours ; and one, or two grains of opium, every three hours intermediately, by mouth, or glyster, to procure ease, and abatement of the spasms.

When the patient is plethoric, or attended with fever, large bleedings, with nitre, and glysters become necessary : but above all things, the patients mind should be calmed, with certain assurances of doing well.

From the inefficacy of many reputed medicines, for this deplorable malady ; there is reason to believe, that their boasted success, has been owing, to their having been given in cases, where the infection, notwithstanding the bite, did not take place, or was not received into the habit.

C H A P.



## C H A P. LI.

## DISEASES OF WOMEN.

*Suppression of Menses, and Cblorosis.*

**T**HE diseases peculiar to women, arise principally from their monthly visits, uterine hæmorrhages, fluor albus, cancers, pregnancy, child birth, and its consequences.

The female sex, by the laws of nature, are subject to a monthly discharge from the uterine vessels, which begins about thirteen, and ceases about forty-five : their natural delicacy, and relaxed state of fibres, subject them in the early part of life to various complaints, which are often *falsely* attributed to a menstrual obstruction : but perhaps it may be doubted, whither this will so often prove the cause, as the *consequence* of other diseases : as in general, for their removal, our principal view should be to remedy the particular indisposition of body, under which the patient may labour : restore the body to a healthy state, and a vigorous circulation, and the menses will naturally return. Hence, different and opposite methods of cure will be required, according



## 254 *Suppression of Menfes, and Chloraſis.*

cording to the habit of body, and nature of the ſymptoms; and the grand point in view, muſt be to invigorate the conſtitution.

This diſorder is called *Chloraſis*, when the patient has not yet had any menſtrual appearance; at other times it is called a ſuppreſſion of them.

It may ariſe from various cauſes, as too great plenitude, or fulneſs of blood; from a glutinous diſpoſition of the humours, and a ſlow and languid circulation; or from a contraction of the uterine veſſels from cold, or any other occaſional cauſe.

In the former caſe from fulneſs, it may be neceſſary to draw off blood; and to order medicines of the attenuating, and gently purging kind: even nitre and whey, may prove the beſt remedy in ſuch habits; or a tea ſpoonful of the tincture of hellebore, given three times a day, in a glaſs of water for ſome time: in ſuch conſtitutions all heating, ſtimulating, and chalybeate medicines are moſt pernicious, though extreamly uſeful to thoſe of a reverſe habit.

But as obſtructions more frequently happen in pale, languid habits, from relaxed ſolids,  
and

*Suppression of Menfes, and Chlrosis.* 255

and a weakened circulation; the intentions of cure will consist in attenuating the viscid juices, strengthening the solids; and promoting a vigorous circulation, by the above remedies.

To restore the body therefore to a healthy state, first clear the stomach, and bowels, of crudities, by gentle vomits, and stomach purges; and then warm and invigorate the constitution by chalybeate, and strengthening medicines; as the bark, and steel waters.

For this purpose, *tinctura sacra*, *Ruffus's* pill, the aloetic wine, may be daily given alone, in small quantities, for some time; or steel medicines may be joined with them: the simple filings of iron, may be given also for this purpose, from twenty, to forty grains daily, and is often found very effectual alone.

Bitter wines charged with warm aromatics, are proper also to animate the circulation, to which steel, and bark, may occasionally be added: the forms N<sup>o</sup>. xx. and xxiv. may be as proper as any for this intention, to invigorate, and strengthen the habit.

When the suppression is owing to cold, contracting the uterine vessels, it is to be relieved by relaxing the parts by warm baths, and

256 *Suppression of Menses, and Chlorosis.*

and setting over the steams of warm water: bathing the feet in warm water, often determines the blood to the uterine vessels, assisted by dry frictions to the thighs, and pills prepared with myrrh, borax, and aloes.

Mercurials are sometimes of great use, to attenuate the viscid fluids, and remove obstructions, in some particular habits.

The most powerful emmenagogues, or forcing medicines, are the compound powder of myrrh, given to the quantity of a scruple, with six grains of salt of steel, and four of extract of safin, given twice a day. The compound elixir of myrrh, may be also given to the quantity of a tea spoonful twice, or thrice a day, in pennyroyal tea; especially, a few days before the expected period.

In short, however, there is nothing more difficult to remove, than some obstinate uterine obstructions; and great caution is often necessary, that the constitution may not suffer by improper, and injudicious medicines; which particular circumstances only can point out.

Dr. *Hamilton* of *Edinburgh*, has proposed a compression of the external *Iliac* arteries, at the place where the tourniquet is put in amputations of the thigh; in order to force the blood



## *Suppression of Menses, and Chlorosis.* 257

blood into the uterine arteries, and open the obstructed vessels about the period of menstruation; he advises for some nights, the sitting over the steam of warm water, in order to relax the vessels; and then the application of compress and ligature, on the vessels above mentioned, for an hour or two; not so tight, as totally to interrupt the circulation, or by forcing the blood into the superior vessels, to endanger respiration; but to produce a fulness on the collateral branches.

As he declares that the experiment was *successfully* tried; we shall not enter on the rationale of this mechanical compression; but mention it, for the sake of those, who may be disposed to make the same trial; after being baffled by regular methods, to strengthen, and invigorate the constitution, that nature might perform her own work.



## C H A P. LII.

### *Uterine Hæmorrhages, and Menstrual Cessation.*

UTERINE hæmorrhages may arise from various causes; if from too great redundancy, and fulness in the habit, in consequence of a prior obstruction, a small quantity of blood

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may

258     *Uterine Hemorrhages, and*

may be taken from the arm, and a gentle opiate given every four hours, viz. ten drops of thebaic tincture in a cup of tincture of roses: if feverish heat accompany it, ten, or fifteen grains of nitre may be added to each dose: the common drink may be the above tincture of roses, lemonade, or barley water, acidulated with spirit of vitriol; by this method the whole mass will be kept cool, and the motion of the blood will be controuled.

A cloth dipt in vinegar, or equal parts of brandy, and vinegar, may be applied cold to the loins, and belly, and be renewed as it grows dry, in order to contract the uterine vessels.

If this method does not succeed, with keeping the patient cool, and quiet, more powerful styptics must be used; as from thirty, to sixty drops of tincture of lead, given twice, or thrice a day: fifteen grains of roach alum, and the same quantity of japan earth, mixed together, may be given every six hours, with a few grains of any aromatic, in order to reconcile the alum to the stomach.

When the flux is by this means checked, the bark may be joined with the above styptics, colcothar, dragons blood, bole, &c. by way of bracing up the relaxed vessels, and  
strengthening

strengthening the constitution: to confirm the habit, and answer also this design, a tea spoonful of tincture of steel may be given twice a day, or oftner, with the decoction of bark.

The blue vitriol is particularly useful under these circumstances, and is thought by some, to be one of the most efficacious styptics, we are acquainted with; it may be given (after dissolving a scruple, in a pint, and a half of small cinnamon water) to the quantity of three, even to six drams, three, or four times a day; or, half a scruple may be powdered, with three drams of compound powder of amber, and given from ten grains, to twenty in the same manner.

A single grain of ipecacuana is directed by some for this purpose, to be repeated every four, or six hours; the alum whey, has also been successfully taken in some obstinate discharges; and a decoction of fresh seville orange-peel is found very useful, as a strengthner of the constitution; four ounces of which may be taken thrice a day. As from the use of these medicines, the patient frequently becomes costive, a proper quantity of rhubarb, or any gentle opening medicine should occasionally be interposed.



260      *Uterine Hæmorrhages, and*

When these lunar evacuations naturally cease by age, their place must be supplied by bleeding in the arm, every two, or three months, if any particular local fulness arises. Gentle purges are highly necessary to take off the redundancy; or three drams of cream of tartar may be frequently taken; as it promotes the secretion, also by urine. The electary N°. xxvi. is in general, properly calculated for this purpose, taken twice a week, in such quantities, as to purge moderately.

Should this stoppage of the monthly discharge be preceded by, or attended with any extraordinary loss of blood; the method above recommended must be pursued, according to the circumstances of the constitution; by bleeding, cooling physic, gentle acids, and opiates; avoiding if possible, the use of powerful styptics, as they are supposed by some to lay the foundation of cancers in the womb: proper well timed bleedings, in small quantities, a few days before the expected critical period, will be of principal use, to prevent this redundancy, and to settle safely the total cessation of these visits; and when particular fulness is observed, gentle purging becomes necessary.

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In short, when nature is disposed to stop this hitherto necessary, and salutary evacuation; the accustomed discharge, must be diverted, or carried off by other channels, as stool, urine, and perspiration; and this must be effected by prudent bleedings, and gentle evacuations, which promote these discharges. But, hot stimulating physic, as *hiera picra* in brandy, which is frequently taken for this purpose, is in many constitutions very injurious, as the complaints are often aggravated thereby, and the flux promoted.

In some full constitutions, the opening an artificial drain by an issue in the leg, is of great use; as it is in some measure compensates for the uterine discharge, and sometimes supersedes the use of medical endeavours.

As nature however, when she suspends this secretion, frequently uses her own means to divert the surcharge, by ways perhaps unknown to us; it should be our business not to intrude too officiously upon her: but when by particular symptoms of local fulness, or immoderate discharges, she seems distressed; on these occasions, the business of art is to procure moderate evacuations, 'till this important point is settled: and this sometimes requires no small degree of skill, in some particular constitutions.



## C H A P. LIH.

*Fluor Albus, or Whites.*

**T**HIS is a discharge of thin matter from the vagina, which is generally white; but is sometimes yellow, or of a reddish ichor, sharp, and corroding; which is discharged both from the womb, and the glands of the vagina.

This disorder requires a different treatment, in different habits. In some, particularly those of a gross, and full constitution, the cure should be attempted by vomits and rhubarb purges, to which a few grains of calomel should be added.

After proper evacuations, cold bathing in the sea should be used; with such corroborants, and restringents, as are adapted to the constitution.

In some olibanum, bark, alum, japan earth, dragons blood, either seperately, or conjointly, may be given to the quantity of a scruple, or half a dram thrice a day: to those of a lax habit, steel medicines may be joined to the above; fifteen, or twenty drops of tincture



ture of steel, with two ounces of a decoction of bark, often succeeds well with such, if it be taken twice a day for some weeks.

Where a scorbutic taint prevails in the blood, it might be dangerous to suppress this discharge, without correcting properly the acrimony of the blood, by decoctions of the woods, sarsaparilla, or lime water; least the humour should settle on the womb, or be repelled to some noble part.

The discharge is sometimes so sharp, as to excoriate the parts, and when it is attended with pricking, smarting pains, we may suspect a malignant tendency: under such circumstances, a milk, and vegetable diet becomes necessary, with the hemlock, and bark, as laid down in the Chapter of cancers.

Injections are often successfully made use of in the fluor albus; for which purpose alum, vitriol, colcothar, compound powder of cerus, &c. may be dissolved in lime, or Smith's forge water, or a decoction of oak bark; two, or three ounces should be thrown up by a syringe, twice a day, in a horizontal situation, and retained for some time: the fumes of cinabar, mastick, amber, and frankincence, mixt

264 *Fluor Albus, or Whites.*

together in equal quantities, may be received to advantage, and must be more effectual, than fomentations.

An eminent physician recommends half a scruple of blue vitriol, dissolved in two ounces of water, to be injected every night: and half a dram of olibanum alone, or joined with the bark, and steel, to be taken twice a day, with *Tunbridge waters*.

When the parts, are much excoriated from the sharpness of the discharge; they should be frequently washed with sponges dipt in milk and water, marshmallow leaves boiled in water gruel, and soft cerates should be applied to them; that of sperma ceti, and the lead ointment, mixed together; bees-wax and oil; or the brown cerate are as proper as any; and when the parts are not excoriated, but attended with itching, they may be washed with a solution of white vitriol, sugar of lead, or compound powder of cerus: bleeding, and cooling physic, is generally necessary on these occasions.

A schirrus, or hardness of the womb, which is readily discovered by the touch of the finger internally, and is to be felt externally over the os pubis; is too frequent, an attendant of  
a malignant

a malignant fluor albus, and too often succeeds the menstrual cessation.

When it is attended with pricking, shooting, or lancinating pain, a degeneracy to cancer, may strongly be suspected; and when it is accompanied with a bloody ichorous, foetid discharge, that it is become ulcerated.

This is one of the most dreadful ailments, to which the human body is subject, as the evil itself is aggravated by the despair of cure. Opiates have generally been fled to, for refuge from pain; and a soft, milk, or vegetable diet, with cooling physic occasionally, is advised, to correct, and carry off the acrimony of the juices.

The medicine chiefly relied on now, for the relief of cancers, especially, those of the womb, is hemlock; which seems to be a sort of specific anodine, and relieves the topical complaint, in a degree much beyond, what opium, or the other narcotics can pretend to.

As to the method of treating cancers in general, we must refer to the Chapters on that subject, and hemlock.





## C H A P. LIV.

*Of Disorders attending Pregnancy.*

**P**regnancy is frequently attended, in the early months of gestation, with pains in the stomach, sickness, head-ach, and vomiting: these complaints, as they arise from redundancy, commonly yield to bleeding, proper evacuations, gentle exercise, and a light, and spare diet: a glass of spring water taken in a morning, has been found of use to abate vomiting; and in case of costiveness, emollient glysters, or gentle opening medicines, should be taken.

*Difficulty in making water*, is a no unfrequent symptom in the early months of pregnancy, and arises from the pressure, and gravitation of the womb, on the neck of the bladder: it generally comes on about the fourth month; and as the womb rises above the os pubis, this symptom is removed of itself: for present relief, bleeding is necessary, to abate the uterine fulness; the body should be kept soluble; the belly should be kept suspended by a proper bandage; and the woman in a supine posture,

'till

*Of Disorders attending Pregnancy.* 267

'till this complaint is removed; endeavouring to urine also in that position.

If the legs swell much, and the veins are knotty, a laced stocking, or rowler, and a recumbent posture are the principal remedies. If piles should prove troublesome, and submit not to gentle aperients, and the methods laid down in the Chapter on that subject, they must be emptied by leeches, or the lancet; and a horizontal situation of the body must be strictly submitted to.

Some sanguine, robust women, are very liable to miscarry at a certain time, or stage of their pregnancy, from fulness on the uterine vessels: this may be obviated by frequent, and early bleedings, particularly for some days, before the usual critical period, and a strict observance of the above rules. Very tender, and delicate women, have also been preserved from abortion, by timely, and frequent bleedings, during the four first months of pregnancy: this quantity should never exceed four, or five ounces; and should be repeated once in six weeks, immediately after conception: two ounces of a decoction of the bark, should be taken twice a day, and the body be kept soluble by a few grains of rhubarb: quiet, and little exercise is absolutely necessary. In

## 268 *Of Disorders attending Pregnancy.*

In this case, the tender fibres of the after-birth attached to the womb, cannot bear the furcharge on the vessels, without yielding; for which reason, as the foetus is yet too small to dispense with the blood appropriated to its support, the local fulness should be prevented by small, and repeated bleedings; and the womb be strengthened by the bark, as above directed: this method has often succeeded in delicate habits.

If a sanguine discharge appears, after falls, frights, or over exercise, attended with pains in the loins, which extend down to the thighs, and terminate laterally at the bottom of the belly; there is great danger of miscarriage: to prevent which, the woman should immediately be put to bed, and lose eight, or ten ounces of blood.

A gentle opiate should be given, and she should repose, and keep herself quite still, and cool, in this recumbent situation, for several days; repeating the opiate occasionally, on returns of pain: food of light, and easy digestion should be taken, or broths of the same kind: as to medicinal remedies, a proper quantity of magnesia, manna, or cream of tartar, may be daily taken, in order to keep the  
body



## *Of Disorders attending Pregnancy.* 269

body cool, and soluble : The drink should be barley water, and such kind of cooling liquors.

When a sanguine evacuation once appears under the above circumstances, it scarce ever goes off, 'till the foetus comes away ; unless it arises from the yielding of some vessels without side the womb : the method above recommended is chiefly to be relied on, instead of restringents, which can be of no use, when a separation of the pedicle, or ovum is once effected. The expulsion is nature's own work, which she is a longer, or shorter time in performing ; and though the discharge is sometimes very considerable, yet, there are few instances, in the early months of gestation, of its proving fatal : the business of art is to restrain it by keeping the body quiet, and cool, with a suitable regimen, and position of body.

*Costiveness*, in the latter months of pregnancy, should be prevented, by taking every night a spoonful of sweet oil ; or occasionally a tea spoonful of magnesia, cream of tartar, manna, lenitive electuary, and such gentle openers.



## C H A P. LV.

*Of Delivery, or Child Birth, and the consequent Symptoms.*

**D**URING labour, no strong nourishment, or drinks, should be permitted; panada, caudle, small broths, toast and water, with a little wine to some, are sufficient: common emollient glysters, with oil may be given every six hours; and when the pains flag, or are short, without bearing effectually, the best cordial to promote them, is a gentle opiate; as liquid laudanum, taken to the quantity of twenty, or twenty-five drops: this medicine, by obtaining a truce with these fruitless pains, generally procures some hours sleep; during which time, the parts are relaxed, the patients spirits are recruited, and she is enabled to enter on her labour with alacrity, and fresh vigour.

The proper duty of the midwife, is not to force, but to assist nature; which, in *natural* births, she seldom stands in need of, 'till the latter part of the labour; when it should be given with all imaginable tenderness, and delicacy; and not in that rough manner, but

too often practised by some; whose course, and rude treatment must necessarily retard labour, by inflaming the parts; and are often the consequential causes of bad symptoms, subsequent to the labour: as well as of lacerations of the perinæum.

If the midwife declares the child comes right, with the head presenting, and is a sensible understanding woman, she will prudently decline any over officious inquiries, and fatiguing the suffering patient unnecessarily; how much soever importuned by her, and her attendants: if she be mistress of her art, she will wait the critical moment, when she can be of real service; in the mean time, she will endeavour to convince those about her, that nature's efforts must be attended to, as preparatory to the midwife's assistance; which will be considerably forwarded by proper efforts of the patient; who should be frequently reminded, that by controuling her cries, and bearing downwards with resolution, the labour will much sooner be terminated.

In short, happy would it be for the fair sex, if they were convinced, that in a *natural* labour, more depended on their own efforts, than on the midwife's skill; and that in a young healthy,



272 *The Disorders consequent of Labour.*

healthy, well formed woman, nature alone is in general, equal to her own task ; that the most successful practitioners are those, who trust most to her ; and avoid every occasion of thwarting her efforts, by an over-officious sedulity, or an insidious appearance of dexterity : this is meant only of natural labours, for in all others, the best and earliest assistance should be obtained.

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C H A P. LVI.

*Of the Disorders consequent of Labour.*

**T**HE usual bad consequence of child birth, are flooding ; inflammation of the womb ; a sudden suppression of the discharges after delivery ; and a fever resulting from the milk.

When excessive *floodings* ensue, the belly should be gently swathed, and folds of linnen, which have been moistened with equal parts of vinegar and water, should be applied cold to the belly, and loins : they should be changed for fresh moist ones, as they grow dry ; and if the weather be hot, the woman should be kept cool : she may be refreshed with, small quantities given at a time, of red wine and water, and a little lemon juice ; and be supported with jellies, chicken, or mutton broths,  
to

to fill the exhausted vessels, and support the circulation. The best styptic, or restringent medicine, is at first twenty drops of laudanum; afterwards the bark, or its extract, may be given every three hours, to the quantity of half a dram, dissolved in a little small cinnamon water, and continued 'till the flux ceases: the styptic powder may also be given for this purpose, to a scruple, or more, if it can be retained on the stomach.

*Inflammation of the womb* is known by pricking pains in the lower part of the belly; by a tenderness, and tightness of the whole; by a continual fever, with a weak, and hard pulse: sometimes incessant vomitings, and hiccups come on, with an intire suppression of urine; and of the uterine discharges; or they are in small quantity, of a reddish stinking water.

This dangerous, and too often mortal disease, must be treated like other inflammations, by repeated bleedings, emollient glysters, and reiterated fomentations to the belly: barley water, and the almond milk, should be drank liberally; in every quart of which two drams of nitre should be dissolved; for if the inflammation is not soon discussed, matter, or mortification will be the consequence.

## 274 *Disorders consequent of Labour.*

On the first attack of these symptoms, no time should be lost, in calling in the best assistance that can be procured ; for such cases are truly perilous ; and a few moments lost, are irreparable. There is no doubt, that many women have fell a sacrifice to their nurses ignorance, and folly, on these occasions ; who on a suppression of the uterine discharge, have instantly recourse to some heating medicine, under an absurd notion of forcing the discharge ; by these means the inflammation is increased, the fever augmented, and the case made irremediable.

The *total suppression* of the discharges after labour, should be treated in the same manner : if fever attends, bleed ; if the belly be tense, and painful, fomentations are of the greatest use ; and emollient glysters, which act as a fomentation within, should be frequently thrown up, and retained as long as possible : these, assisted by the neutral salts, or mindererus spirit, will in general, by relaxing the vessels, restore the proper discharges : but, if the heating method be made use of, in order to force the uterine evacuation, the event most probably will be like the preceding.

If the *milk fever* runs high, the cooling methods above recommended must be put in practice,



practice, with a very light diet, consisting only of panada, caudle, barley water, &c. glysters should also be thrown up every six hours; and as this fever usually terminates in profuse sweats, a spoonful of mindererus spirit, may be occasionally given to promote that secretion; or a scruple of the fever powder, N°. xi. with a few grains of saffron, may be taken every four, or six hours, to favour that intention of nature.

If there be no discharge of milk from the breasts, they should be drawn by a child, glassess, or a proper person, before they become too turgid, and hard: if the tension be very great, they may be fomented with warm milk, and water, in which a little hard soap is dissolved; and covered with sperma ceti cerate, spread on fine rags.

In general, if the breast be kept warm, either by soft cloths, hare-skin, or what is better, by fine flannel, covered with linnen; little inconvenience arises after the first flow; and, if the milk discharges, the breast will soon subside.

The early application of medicines to repel, and check the flow of milk, is often productive of bad consequence. A tide of

276 *Disorders consequent of Labour.*

this fluid flowing by nature's appointment to the breast, for the nourishment of the child, can never surely be suppressed, without risking the health, and often the life of the mother. How often do the breasts, which this method was intended to preserve, suffer by this preposterous treatment; either immediately, by imposthumes, and gathering; or remotely by indurations of the glands, which too often degenerate into cancers.

If fortunately this load of milk repelled back on the blood, be discharged by sweats, stools, or urine, all may be well; but should it be retained, and in the course of circulation, be lodged on the head, chest, pelvis, or any parts within; what mischief may it not be productive of; what strange, and uncommon symptoms, does it not often produce. If nature be powerful enough to throw off the milky serum on the skin, in the form of miliary eruptions, how tedious, how dangerous often the event; and frequently also, it is found insufficient for the discharge of the accumulated load.

On inspecting the bodies of these unhappy people who die, are not milky secretions frequently found deposited on the noble parts, essential to life, which no art, or skill could draw off?

Milky

Milky defluxions on the limbs are by no means uncommon; and happy the patient, when nature can thus exonerate herself, as she often does, by depositing the milky serum on the legs, and thighs. A swelling, with acute pains, frequently attacks the hips, runs down the inside of the thighs, to the knee, and foot, and occasions sometimes an enormous tumour of the whole limb.

This complaint is often taken for rheumatic, and is thought to be occasioned by taking cold; but, in fact, it is owing to a translation of the milky serum to these parts, deposited on the cellular membrane; if it be not dissolved by proper fomentations, and other surgical applications, with gentle evacuations by stool, and urine, a collection of matter is formed; or a dropsical swelling ensues; from which, on scarification, a large quantity of lymph is discharged.

That these swellings arise from milk retained in the blood, is past all doubt; as on proper inquiry, on these occasions, quantities of curdled milk have often been discovered in the stools; and for several days together; especially where a plentiful secretion of milk in the breasts has been repelled, and thrown back into the circulation; where after some-



## 278 *Disorders consequent of Labour.*

times producing a train of very anomalous symptoms, it is happily thrown off in this manner.

When nature is not so beneficent, we are thus directed by her efforts, to carry off the redundancy by repeated purges, diuretic medicines, and gentle sudorifics.

Though it may be difficult to account for the passage of milk, thrown on parts destined by nature for its reception; yet the facts are not less true; and that it often, (circulating with the blood, and other fluids,) stagnates in the small vessels, or lodges in the cellular membrane of different parts of the body; where it frequently produces very acute pains, 'till it is dispersed, or terminated in the manner above related.

Experience teaches us also, that milk is apt to coagulate, and to take false routs, by lodging in places, where it ought not to be naturally: the heat of the part often contributes to this circumstance, but the admixture of some juices it may meet with, is more generally the cause; and produces those knotty hardneſſes in the glands, so frequently met with, in the breasts, and elsewhere.

When

*Disorders consequent of Labour.* 279

When the milk thus coagulates, or curdles as it were in the breasts, it is of importance to attenuate, and dissolve the thickness; which would otherwise degenerate into a hardness, and prove a schirrus: to this end, the swelling may be rubbed twice a day, with oil of roses, mixed with a fourth part of spirit of sal armoniac, covering it with the soap plaister: if it should not resolve under this treatment for some days, the poultice, N°. xli. may be applied twice a day, or that of hemlock. If the knot be indolent, and unattended with shooting pains, after anointing it, with a little mercurial ointment, apply over it the hemlock plaister, with mercury: by these means, they will often melt down, and gradually dissolve away. If they turn out obstinately hard, with any degree of pain, all irritating applications should be avoided, and recourse be had to the knife for extirpation.

There is no excretion after delivery, of more consequence to the patients recovery, than a free perspiration; which is so absolutely necessary, that unless the woman has a constant moisture on the surface of her body, for some days after the birth, she seldom recovers to advantage: her health therefore depends on enjoying undisturbed repose, and a constant

280 *Disorders consequent of Labour.*

breathing sweat; which prevents fevers, and generally carries off that of the milk in particular. If this point is not obtained by the usual diet, a paper of the powder, N<sup>o</sup>. xi. may be given every six hours; or in case of pains, a scruple of mithridate may be given in the same manner.

The *afterpains*, that usually attend women subsequent to labour, generally arise from spasms, or clotted blood retained in the womb; which are best alleviated and removed by gentle opiates, given every four, or six hours, after labour: thus, eight or ten drops of liquid laudanum may be given for that purpose; and will generally remove those spasms, by relaxing the mouth of the womb, and permitting those coagula, or clots to slide through: when the mother does not suckle, her diet should be caudle chiefly; neither chicken, or meat broths of any kind should be suffered, 'till the milk fever is passed: the bowels should be opened by the third day, at farthest by glysters, or otherwise; the former is more preferable, as the safest remedy to be depended on, for that purpose; and as it promotes the uterine discharge.

If the mother suckles, less restraint may be laid on her; and the child should be put  
to



to the breast the second day; both to promote the flow of milk, as well as for the benefit, of the first draught to the child; which being thinner than the subsequent milk, and of a purging quality, is of use to carry off the recrements collected in the child's bowels, during its stay in the womb.

A greater indulgence may undoubtedly be given to those who nurse their own offspring, as the provisions of nature for that purpose, are not hindered from passing through the proper channels of the breast; or is a reflux of the milky tide into the blood to be apprehended, as in those who do not give suck. A premature indulgence therefore to the latter, is often productive of irreparable mischief, by heightening the milk fever, and occasioning milky defluxions on different parts, both within, and without; which are prevented only, by drawing off the milk, through its natural channels; by a temperate, and abstemious regimen; gentle evacuations; and by promoting kind breathing sweats, which should be supported at least for seven, or eight days.

It may be worth observing, that those children, who are suckled by nurses, should have their bowels thoroughly emptied by diluters, and

and mild purgatives for some days, before they receive the nurse's milk; as it wants the purgative quality of the mother's; generally mixes unkindly with the recrements in the child's bowels, and is often productive of bad symptoms, if this precaution is neglected. The disorder called *the red Gum*, is by some attributed to this cause; and perhaps inward fits may have their source from hence.

The nipples of women who give suck, are often fretted, and excoriated, which proves very painful to them, one of the best applications, is oil, and wax melted together, or the sperma ceti cerate, deers suet, the caul of a sheep, starch, treacle, &c. are often successfully used for this purpose; and the washing them with three parts of lime water, and one of brandy, is very conducive to dry up the excoriations, and harden the skin.



## C H A P. LVII.

### *General Directions in regard to Children.*

**W**HEN a child is born, and neither cries, or breaths, proper means should be made use of, to give the air a free passage to the lungs; and this is sometimes prevented by

by too close an adhesion of the root of the tongue to the palate : care should be taken to depress it, by introducing a finger, or spatula into the mouth for that purpose : if this method succeed not, the air should be blown for some time, by a by-stander, into the mouth of the child : pinching its nose close at the same time, to prevent its return thereby, instead of inflating the lungs : this method is in general so successful, where there are any remains of life, that it is seldom any others are of use, if this method does not succeed : as it is simple also, it is in the power of any one to put it in execution.

The dress of a new born child can't be too simple, or the bandages too slack, if they barely press the body. It is a barbarous custom, to make living mummies of them, the moment they are born, by closely confining their legs, and arms, and depriving them even of that liberty, which they enjoyed in the womb : whoever has seen a child undressed, and delivered from such barbarous incumbrances, must with pleasure have sympathised with it, in the full enjoyment of its natural powers, thus unrestrained, and at ease.

But besides the mischief arising from the weight, and heat of the usual swadling clothes,  
which



which all together are almost equal to the child's own weight; the bowels are injured by their pressure; the circulation restrained by the compression of any one part, produces unnatural swellings in some other; and doubtless, the many distortions, and deformities we meet with so frequently, are owing to this cause. Nature, exact nature, has not produced her chief work, a human creature, so carelessly unfinished, to want such idle aid, as these, to make her perfect.

The following dress would be sufficient. A little flannel waistcoat without sleeves, made fit to the body, and tied loosely behind; to which there should be a petticoat sewed, and over this, a kind of gown of the same material, or any other, that is light, thin, and flimsy. The petticoat should not be quite so long as the child, the gown a few inches longer, with one cap only on the head, which may be made double, if it be thought not warm enough. Shoes, and stockings are needless incumbrances, besides they keep the legs wet, and nasty, and often cramp, and hurt the feet, nor can be necessary, 'till the child is able to run in the dirt. There should be a thin flannel shirt for the night, which ought to be every way quite loose. In such a simple,

ple, pleasant dress, which may easily be put on, and off, children would find themselves perfectly easy, and happy; enjoying the free use of their limbs, and faculties, when thus left at liberty: this dress might be contrived to be tied on, so that a single pin need not be made use of.

In order to strengthen, and invigorate the bodies of young children, they should be washed, some few days after their birth, with cold water, in the state it is brought from the spring; and to confirm this habit, they should be regularly washed every day, in every season, and every sort of weather; and in the fine warm season, they should be plunged into a large tub of water, as is the practice in many countries.

We should be careful not to cram them too much, nor conclude that all their cries are the effect of hunger: those who overload them with victuals, are guilty of great error; happily for the child, one half of it, is frequently rejected, the stomach not being able to bear the oppressive load; hence, the observation of nurses, that the puking child thrives best; *i. e.* because it has less to digest. The stomach, when over distended, suffers in its force,

force, and functions, and becomes less liable to digest properly: the excess of the food last received, impairs the concoction of the quantity, that was really necessary; which, being badly digested, is so far from yielding any nourishment to the infant, that it weakens it, and proves a source of diseases, and concurs to produce obstructions, rickets, &c. by sending crude chyle into the blood.

The food of a child should be plain, simple, and fresh made; for the first three months, it should be light, and easy of digestion; prepared chiefly of good bread, sea biscuit, boiled in water; to which fresh milk may be added, (when the child don't suck) but not boiled; for by boiling the finer parts of the milk are evaporated, and the remainder left viscid, and less fit for digestion.

Neither sugar, spice, or wine, should be added to this simple mess; nor heating seeds, or leaves, under a notion of breaking the wind; they are what luxury only has introduced, to the destruction of the health of mankind.

After three months, the child's diet should be partly animal; as a total vegetable one of milk and bread, or biscuit, is apt to produce



duce acidities in their stomach, and bowels; a thin, light broth, or beef tea, therefore may be given once a day with bread, or rice boiled in it, (which last is not so acescent, as any other meal, or flour,) and once with the milk prepared as above.

No pastry, custards, puddings, &c. prepared with unfermented flour, and eggs, should be given to infants; much less should animal food of any kind, 'till they have teeth to chew it: though about the age of six months, many injudiciously indulge them with minced chicken, and other light animal food; which they ought not to touch, 'till nature has given them teeth to chew it.

A due regard should be had to their bread, that it be not sophisticated with alum, or other tricks of the baker; for the salubrity of this necessary, and common viand, depends on the breaking, and attenuating the tenacious particles of the flour, by a due fermentation with the yeast: for which reason, rous may be preferred to household bread.

As the general cause of most diseases of infants, is manifestly from the acescent quality of their food; so when acidity prevails, milk, bread, and every thing vegetable, except

cept rice gruel, should be abstained from; and in their room, sea biscuit, small animal broths, beef tea, decoctions, and jellies of hartshorn, should be substituted in their room.

Children should be *daily rubbed*, and exercised as much as they can bear, after they are some weeks old; that sort of motion they receive afterwards in go carts, or other vehicles contrived for their use, is more beneficial to them, than what they have from their nurse's arms, because they are in a better attitude in the former, and it heats them less in summer, which is a circumstance of no small importance to them; considerable heat, and sweat disposing them to be ricketty.

Infants are by no means more subject to death and disease, than grown persons; on the contrary, they bear pain, and distempers, much better; their blood and juices are sweeter, and less contaminated of course; they are naturally warmer, as appears by the thermometer; and would bear the cold of a winters night, much better than any adult person whatever. There are many instances both antient, and modern, of infants exposed, and deserted, that have lived several days; which ought to convince us that nature has made children  
able

able to bear even great hardships, before they are made weak, and sickly, by their mistaken nurses.

In all other productions of nature, we see the greatest vigor, and luxuriance of health, the nearer they are to the egg, or bud; they are indeed the most sensible of injuries, and it is injury only that destroys them. When was there a lamb, a bird, or a tree that died because it was young? these are under the immediate nursing of unerring nature, and they thrive accordingly. Let it therefore be our care to protect the human nurslings from injury; let us treat them with the simplicity of nature; and let not our officious services, be the greatest injuries, the helpless creatures can suffer.

Among the lower class of mankind, especially in the country, health, and posterity, are the portion of the laborious peasant, and his offspring: the want of superfluity confines them within the limits of nature: hence, they enjoy blessings they feel not, and are ignorant of their cause. The mother who has only a few rags to cover her child loosely, and little more than her own breast to feed it, sees it healthy and strong, and very soon able



290 *General Directions, and Observations*

to shift for itself; while the puny insect, the heir, and hope of a rich family, lies languishing under a load of finery, that overpowers his limbs; abhorring, and rejecting the dainties he is crammed with, 'till he dies a victim to the mistaken care and tenderness of his fond mother.

The navel string should always be suffered to drop off, of its own accord, which it generally does in six, or seven days, and close to the belly: if it should be pulled off abruptly, before the arteries are closed, and healed up, a dangerous bleeding would succeed; or a weeping from the part, that proves troublesome, if improperly managed. To restrain the bleeding, a little button of lint may be applied over the bleeding vessel, dipt in bole, colcothar, alum, vitriol, or tincture of galls; and be kept close to the part by the fingers, 'till the bleeding stops, and the vessel is closed; when a proper compress should be applied over the pledgit, and its removal secured by a bandage: if these succeed not, the ligature must be applied.

When from too early a separation of the navel string, and the improper application of greasy ointments, a little fungus is produced, and

is attended with a sanious discharge; the shortest method is to touch it lightly with a bit of caustic, and apply to it dry lint: or burnt alum may be sprinkled thereon, and drying applications be used, such as a solution of alum, or vitriol, in lime, or forge water: When such drying, absorbent dressings are not made use of, the cure often proves tedious, and troublesome.

We shall, for the information of the curious, insert some observations on inoculating children at the breast, by Dr. *Matty*.

‘As it is doubted by many, whether the present successful practice of inoculation, though beneficial to individuals, is not detrimental to the community, by the propagation of the natural small pox; there seems no other way of making it generally useful, than by inoculating children as soon as possible after their birth; as at this period, they are in the most perfect state of health; their blood, and juices yet untainted; the milk prepared for them, in the breast, is at the same time, both food, and physic; and as the disorders incident to them, lie chiefly in the stomach, and bowels, the appearance of the stools evidently point out the little helps that may be requisite.’

## 292 *General Directions, and Observations*

On comparing the bills of mortality for thirty years ; it has been found, that about one half of the children are carried off by the small pox, under five years of age ; and as inoculation is not *generally* practised 'till about this period, the loss to the community is considerable: besides the advantage from inoculation, of being for ever secure from the danger of receiving, or communicating this infectious distemper, is a circumstance of no small consequence.

The hazard from inoculation at the breast, compared with the chance of getting the small pox naturally, before the usual time of inoculation, will bear no scrutiny ; it having been found as successful then, as at a more advanced age ; and was this method generally practised throughout the kingdom, in less than half a century, an end might be put to the very existence of a distemper, which from its first appearance, has made more havock, than the most destructive wars ; unless it was afresh imported among us.

If children could be kept from catching the small pox, 'till the time appointed for conveying the artificial infection, it might be thought not very material, at what age the trial was made :



made: but as that is impossible; to enjoy the full benefit from inoculation, it should be put in practice on children, while at the breast, before they are three months old.

Dr. *Matty* thinks no subjects are better disposed for inoculation, than new born children; the mildness he says of their fluids, the absence of any idea of fear, their propensity to sleep, are advantages, and no very inconsiderable ones, which infancy enjoys. A healthy child stands in need of no preparation; no bad habits to be corrected; no passions to be checked; no ideas of danger, or lowness of spirits to be combatted.

As to the danger from teeth, it could have no weight, if inoculation was performed at the above period; and indeed at any other, there is little to apprehend; as opening the gums will, at any time, obviate any inconveniencies from that quarter. Medicines will hardly ever be required; and if wanted, there is perhaps no time, when they could with less difficulty be given, both by the mouth, or by glysters.

The convulsions, or fits, that are sometimes a prelude to the eruption, are so far from being a threatening symptom, that experienced

## 294 *General Directions, and Observations*

practitioners have looked on them, rather as a favourable sign. In short, the natural strength of young children, before they have acquired any adventitious disorders by bad nursing, or management, has been proved, in the preceding part of this Chapter, to be very considerable; and that they are able to bear great hardships, before they are enervated by their absurd nurses; or their blood, and juices contaminated by pampering, and ridiculous indulgencies.

The preparation for inoculating children of a more advanced age, and even for adults, should not be too rigorously observed; and must be varied in different constitutions: an indiscriminate method applied to all must be absurd, *and peculiar nostrums, and specific remedies*, should be rejected with the contempt they deserve: previous to inoculating some children, especially where worms are suspected, a few grains of calomel may be properly given, to cleanse the bowels of their foul contents; but to give this medicine indiscriminately to all, may be pernicious.

It has been proved by the most candid experiments on numbers of children, that ten days, or a fortnights abstinence from animal food, with  
three

three moderate purges, is in general a sufficient preparation for most: and that where calomel was given, or omitted, the event was pretty nearly the same: the success depending chiefly, on judiciously exposing the patient to the open air, during the whole progress of the distemper.—We think however that children should not be inoculated 'till they are a year old, or by choice 'till two, or three; as the tender habits of some, are unable to bear the shock of fits, and some other previous symptoms; nor can they often be kept so cool, as one would wish.

As the lives of young children, are of no small importance to the state, so the amazing mortality of them, before they arrive at two years of age, is a melancholy subject of reflection, and sensible emotion: this must undoubtedly arise from some error in their management, as no other animal, or vegetable, dies merely on account of being young. The vulgar notion, that they want little medical assistance is erroneous, and perhaps is the cause, that it is in general sought for too late; for the physical treatment is more obvious, than is generally conceived, as their diseases are more simple, and less frequently com-



plicated than those of adults : but it may be objected, that children cannot point out, or describe their complaints ; true, or can a man delirious in a fever, or one apoplectic ? yet will not the symptoms in either case speak for them ? these conflicts are the voice of nature in distress, which the sagacious physician should be intimately acquainted with.

The early disorders of young children, are principally in their stomach, and bowels ; their foetid breath, vomiting, purging, tension of the belly, the colour, and smell of their stools ; their violent cries, and drawing up their legs ; the fever, pulse, &c. most evidently point them out, nor can they be mistaken.

We shall therefore endeavour to obviate some of the mischiefs brought on them by their ignorant, and imprudent nurses ; and to prevent such evils, as their erroneous methods but too frequently produce ; by laying down the most simple, and effectual means of treating their complaints ; which arise chiefly from the *meconium*, or excrement contained in the infants body at the birth ; *acidities*, or sharp viscid humours in their stomach, and bowels ; the *cutting of their teeth* ; and *worms*.

## C H A P. LVIII.

*Of the Meconium.*

THE stomach, and guts of an infant, at its entrance into the world, are filled with a black sort of viscid matter, called *Meconium*, which was collecting during its stay in the womb. — It is necessary this matter should be discharged, before the infant sucks any nurse, except the mother; since it would otherwise corrupt the milk, and becoming extremely sharp itself, there would result from their mixture, a double source of evils, to the destruction of the infant.

The evacuation of this excrement is procured, by giving them no milk at all for the first forty-eight hours of their lives, (except the mother's own, which is purgative,) but giving them during that time, now and then, a spoonful of water, to which some sugar, or honey, must be added; which will dilute the meconium, and promote the discharge of it by stool; a little cassia dissolved, or a tea spoonful of Castor oil, are proper also for this purpose.

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To be more certain however of expelling all this matter, they may be given at times, half an ounce of syrup of roses, and oil of sweet almonds, with three, or four grains of rhubarb, diluted with a little water; this should be taken within the space of twenty-four hours. But when the mother, attentive to her own true interest, as well as her infants, and listening to the voice of nature, and her duty, suckles it herself, these remedies seem useless: the mother, as before observed, should give her child the breast, as soon as she can: the first milk being serous, and watery, will be serviceable, as a purgative, and forward the expulsion of the meconium.

Should the great weakness of the child seem to call for some nourishment, there would be no inconvenience in allowing it *thin* bread and water pap. But, by all means, avoid giving it the nurses breast for two, or three days; or stuffing it too soon with thick pap, which has been the bane, and destruction of thousands, by giving it thus prepared, and prematurely: for the bowels of a child are never so full, as when they come into the world, and ought therefore to be first emptied, before any thing adventitious is received into them: the first evil therefore may arise from preposterous management,



management, and lay the foundation for fits, and many other disorders.

There are frequently found on the heads of new born children, swellings from extravasated blood: these, if small, are generally dispersed by the application of compresses wetted in brandy, and water, or red wine and vinegar, to which a little crude sal ammoniac may be added. If the absorption of the blood, and dispersion of the swelling is not effected by these means, the swelling may be opened, to discharge the blood; and then dressed with lint, and common digestive.



# C H A P. LIX.

*Of Acidities, or sharp Humours in the Stomach, and Bowels.*

**N**Otwithstanding the bodies of children have been properly emptied after their birth, yet the milk very often turns sour in their stomach; producing vomitings, violent colics, convulsions, looseness, green curdled stools, terminating often in death.

There are two intentions to be pursued in such cases; which are to carry off the sour, acrid,

acid, or sharp humours ; and to attemperate, and prevent the formation of fresh matter.

As the green stools are owing to the too great quantity, and acrimony of the bile ; and the four, curdled, and slimy ones, to a load of acid phlegm in the stomach, and bowels ; the root of the evil should first be attacked, as the most certain method of relieving the symptoms.

Let the stomach therefore be emptied of its sharp, and viscid contents, by a gentle puke ; which, if it operates not by stool, as it frequently does, should be succeeded by a gentle purge ; so that the stomach and bowels may be thoroughly unloaded of their contents, before absorbent medicines are used, to correct the remaining acrimony.

The puke may be half a grain, or more, of *Indian* root, or a tea spoonful of its tincture ; or five, or six drops of the antimonial wine, which we have remarked on, in the Chapter of convulsions.—The purgative may be rhubarb joined with magnesia ; the former alone, being sometimes too griping.

After thus repeatedly emptying the bowels, and stomach of their acrid contents ; absorbent powders, as those of egg shells, chalk, crabs eyes,  
oyster

oyster shells, &c. are to be given liberally with, or without a few grains of rhubarb; magnesia taken alone in the child's pap, will frequently answer this purpose.

They may be relieved in the fit, by glysters of chamomile flowers boiled in water, in which a bit of soap, of the size of a hazel nut is dissolved. A piece of flannel wrung out of the same, may be applied over the stomach, and on the belly; which often mitigates the violence of the pain. If they suck, they should refrain from the breast, 'till their stools, which are green, curdled, and foetid, have acquired their natural complexion; and the nurse should drink frequently lime water, and milk, to correct her own.

The form N<sup>o</sup>. xxxiii. will resolve the coagulated milk, gently open the belly, and answer every intention: or plenty of any absorbent powder, as crabs eyes above mentioned, with a proportionate quantity of rhubarb, will in some, have the same effect, if they are persevered in, 'till the symptoms cease; they may be mixed up, as the above, with four ounces of mint, or egg shell lime water, and an ounce of syrup of roses, or marshmallows: a spoonful of which should be given every hour, 'till



'till the symptoms cease: this lime water diluted, will often be found of service, by correcting the acidity in the child's bowels.

One of the most certain means to prevent these colics, is to move, and exercise children as much as possible; to accustom them to sea biscuit pap, in which magnesia is sometimes added; and to restrain them from sucking so often, when their stools begin to smell sour, and look curdled, 'till the cause is removed: in short, milk should be totally prohibited for some days, and particular attention should be had to the nurse's abstaining from vegetable, and every acid diet on this occasion.

Thus, a discreet use of vomits, magnesia, chalk, crabs eyes, calcined oyster shells, and rhubarb with small animal broths, would answer almost every intention, for relieving the disorders of children, in the early months; by correcting the acidity in the bowels, and carrying it off by stools; but, these absorbents, should be given in larger quantities, than they usually are, when the symptoms are violent, *viz.* to two, or three drams in a day, with proper purgatives.

When children however are in great torment, and thrown into convulsions by agonizing

nizing pains, occasioned by the above acidities, or other acrid humours; till the medicines above recommended can take place, half a dram of mithridate dissolved in three, or four spoonfuls of gruel, may be occasionally thrown up by glyster; giving the medicines every hour, till the acrid humour is obtunded, or carried off. On particular emergencies also, two, or three drops of thebaic tincture may be safely given to abate the tormina, and violent spasms in the bowels, incited by the acrid humours: but this medicine should be cautiously given, and only, on such emergencies: little or no sugar should be given in the child's pap, on account of its promoting acidity in the stomach, and bowels.

The following antimonial solution, is proper in most fevers of children; as it cleanses the stomach, and bowels, the source of most of their complaints; and promotes all the secretions, when it does not operate immediately on the first passages.

Dissolve a grain of tartar emetic, in three ounces of water, with half a dram of crabs eyes, and sweeten it with syrup: to very young infants, give a tea spoonful; to one of three months, two; and so on, repeating it, according

ding to the effects, or operation : a middling tea spoonful, is equal to about five drops of the antimonial wine : when their stools are very sower, curdled, and green, a few drops of *lixivium tartari* may be occasionally given.



## CHAP. LX.

### Of Worms.

**T**HE symptoms which denote worms, are a disagreeable breath ; itching of the nose ; a tumid, hard belly, attended with pains therein ; the countenance looks unhealthy, the eyes appear dull, furrounded with a livid circle : the whites of the eyes are sometimes visible while they sleep ; they start frequently, and grind their teeth : the urine is often straw coloured, and whitish : drowiness, convulsions, irregular fever, and pulse ; a small dry cough, slimy stools, loss of sight, and speech ; paralysis of the arms, and legs, and many other symptoms ensue, occasioned by worms gnawing, and irritating the nervous coat of the stomach, and bowels.

There are three different species of worms.  
— The *teretes*, or round worm ; the *tania*,

or



or tape worm; and the ascarides, a small worm, whose seat is *principally* in the rectum.

The most efficacious remedies for destroying worms, are tin, and its preparations; mercurials; salt of steel; and Castor oil: the filings of tin may be given from a scruple to a dram, twice a day, in treacle, honey, &c. some give it powdered very fine; others give it coarse, and rasped, and attribute the good effects then to its mechanical grinding quality: the *Aurum Muscum* is given, from two scruples, to two drams daily: the filings of iron may be taken for this end; or a solution of a dram and a half, of salt of steel, in a pint of water, may be given from two, to four ounces, twice a day. *Æthiops mineral*, given from a scruple, to half a dram, is an excellent remedy, to which sometimes an eighth part of rhubarb is joined: but during the use of the above medicines, it is necessary to give a mercurial, or brisk purge, to carry off the dead worms, and clear the bowels of the slimy mucus, which envelopes, and nourishes them.

There are a multiplicity of medicines given for this purpose, as worm seed, dried box, *Indian pink*, bears foot, and most bitters; which act principally, by strengthening the stomach, and bowels,

and thus ejecting them: they may be given from a scruple to half a dram, twice a day: two drams of the former with the same quantity of senna, infused in four ounces of lemon juice, and sweetned with syrup of violets, has often been given successfully to children, a large spoonful for a dose, every night.

The ascarides, or thread worm, are attended with great uneasiness in the rectum, an almost intolerable itching of the anus, a tenesmus, and mucous dejection, with griping pains above the os pubis; this symptom is generally relieved by injecting milk, and oil: this latter alone, sometimes brings away these animalcules: this kind of worm, though with difficulty cured, is not dangerous, they having accompanied many people through their lives, without any reason to suspect, that they had hastened their death.

The mucus, or slime in the bowels, is the nidus, or nest of the ascarides, and perhaps of other worms; in which they live, and are nourished: those purges, or other medicines, which scower off this mucus, are the most effectual; as worms themselves may be defended from the immediate action of medicines; and therefore those purges are the best  
which

which act briskly, and whose repetition can be most easily born: purging, and sea waters are proper for this purpose, with proper doses of jalap, with sugar for children.

The smoak, or decoction of tobacco, is said to have destroyed them, when they are lodged in the rectum; bitter apple steeped in linseed oil; a decoction of savin, worm-wood, wormseed, myrrh, &c. are frequently injected for this purpose, to half a pint of which, some add two, or three drams of oil of turpentine.

In the Medical Transactions we have a remarkable account, of the good effects of common salt, taken in large quantities. The patient, after being reduced to the most deplorable state, took two pounds of common salt, dissolved in two quarts of spring water, in less than an hour: this produced great sickness, and violent vomiting, in which, were discharged half a pint of small worms like bots, and some ascarides: after this, the salt soon procured itself a passage through the intestines, and discharged from them, near an equal quantity of the same kind of worms, which he had vomited. The third morning, he repeated the same dose, the effects of which were nearly similar to the former, only that most of the



worms were now burst, and came away with a considerable quantity of slime, and mucus: for two, or three mornings before the full, and change of the moon, he continued to take half a pound of salt, dissolved in a pint of water, by way of precaution, though he felt no return of his disorder.

We shall conclude this Chapter, with Dr. *Alston's* remedy for the flat tape worm, which we have frequently given with success; and known it discharge worms of seven yards in length. To adults, he gives two ounces of the powder of pure tin, sifted through the finest hair-sieve, mixed with eight ounces of treacle, after the patient has been purged, with an infusion of senna, and manna, the *Thursday* preceding. On the *Saturday* following, he gives half an ounce of the tin, in two ounces of treacle, and as much on *Sunday* morning: on *Monday* he gives a dose of the same infusion, and then repeats it, as a disposition to breed worms, shews the digestive powers are weak, and imperfect, great care should be taken, that the diet be light, and easily digested: a continued use of filings of steel is proper to strengthen the stomach, and destroy the disposition to breed worms; and warm aromatic bitters, the bark, and chalybeates, are adapted to answer this intention.

## C H A P. LXII.

*Convulsions, and Fits.*

**I**T is worth remarking, that convulsions are more frequently a symptom, attending some other disease, than an original disease themselves; that they depend on a variety of causes; that from this consideration, there can be no general remedy for removing them; and that the only medicines proper, are those adapted to the particular cause.

Thus, when putrid humours, in the stomach, and bowels of children, produce convulsions, by irritating their nerves, and thus disordering the whole nervous system; the original cause must be removed by vomits, glysters, and purging medicines.—When they arise from vitiated milk, the child must be treated as above, and abstain from sucking, 'till the disorder is removed, and the milk made fit for its reception.—When this disorder arises from worms, or teeth, the child must be treated as we have already mentioned; when from a rash repelled, or from a stoppage of the running behind the ears, the warm bath, and

blisters, become absolutely necessary; — and from fever, preceding the small pox, and measles, the treatment should be peculiar to those diseases.

A general remedy, or specific for children's fits, must therefore be absurd; and those that are of a stimulating, hot nature, oftner produce convulsions, than allay them, by their violent action on the irritable organs of children: astringents, and opiates, such as *Godfrey's cordial*, *diascordium*, &c. must ever be pernicious, though they may for the present produce an apparent tranquility, by abating the sensibility of the nerves.

As the generality therefore, of *convulsions*, and what are called *inward fits*, arise from some acrimony in the contents of the stomach, and bowels; which stimulates their tender nerves, so as to produce general, or particular spasms, or convulsions; so the first intention of cure, as we have already observed, must be the removal of the offending cause by evacuations: The most expeditious method then, is undoubtedly, by giving a puke; which, by experience, we know may very safely be given to a child in the month, who vomits readily, and easily: half a grain, or a whole one of

*Indian*



*Indian* root may be given for this purpose ; or a tea spoonful of its tincture : some prefer five, six, or more drops of antimonial wine, as it has the advantage of operating both ways ; and by that means thoroughly cleanses the bowels : if they operate once, or twice at most, it is sufficient, as it is better to repeat the puke soon, than strain them too much at a time. After the first month, seven, eight, nine, or ten drops of this last medicine may be given, according to the child's strength, or the urgency of the case ; and at three, or four months old, ten, or fifteen may be safely taken.

If the child should be costive ; previous to giving the puke, a glyster should be thrown up ; afterwards the contents of the bowels should be cleared off, by repeated doses of magnesia and rhubarb ; so long as the contents appear slimy, and foul, so long the repetition of the purgative becomes necessary.

When fits are known to arise originally from the head, or are hereditary in a family, a blister should be applied to the back, and the usual antispasmodics given ; as *valerian*, *castor*, *asafætida*, *mosch*, either in substance, or tincture, and diluted in spring water : bleed-

ing with leeches, or the lancet, may be necessary, if the child be of a replete habit, with gentle purges.

The cardamine, or Ladies Smock, has been frequently given with success, for these kind of fits, from ten, to twenty grains, twice a day for some time.



### C H A P. LXIII.

#### *The Thrush.*

**I**S a disorder of the mouth, stomach, and bowels of infants; which appears in the form of white specks in the lips, mouth, tongue, and fundament: they gradually increase, and adopt a yellow, and in the progress of the disease, sometimes a duskyish dark colour.

As this disorder seems to arise from a foulness of the glands of the stomach, and bowels, the most rational method of cure, seems to be the emptying them of their putrid contents by gentle, and repeated pukes, and mild purges; interposing the absorbent powders, to correct the prevailing acidity, either alone, or mixed with magnesia; though this latter alone, will frequently answer the purpose, given two, or three times a day in a proper quantity.

As

As to local applications, the parts should be rubbed with honey of roses, acidulated with spirit of vitriol, or that of sea salt; and, if the floughs should be foul, and deep, a little ægyptiacum should be added; or the parts may be washed with a light solution of white vitriol in barley water, about ten grains to half a pint, to which, a little honey of roses may be added to soften it. If a tea spoonful of this mixture was now and then swallowed, it would be of use, in cleansing the stomach, and bowels, furred up with these foul contents.

A late ingenious author recommends a composition of borax and honey; the proportion of a dram of borax, finely powdered, to an ounce of pure honey, he says, is sufficient in common cases; tho' in some, he puts two: He directs the adult patient to take a tea spoonful, or two, every hour, swallowing it leisurely, and in such a manner, as it may spread itself all over the mouth, and throat: after the thrush is removed, to ease the smarting pains, and tenderness of the parts, he recommends the mucilage of quince seed to be held in the mouth: this medicine made milder, is also very beneficial to children; and may be mixt up in red currant jelly, or mulberry syrup, where honey disagrees.

C H A P.



## C H A P. LXIV.

*Of the running behind the Ears of Children, &c.*

**T**HIS natural discharge from behind the ears of young children, is of so much consequence to their healths, that it cannot be too much attended to; as on the suppression, or premature drying up, scabby eruptions on the face, and head, often ensue; and sometimes fits, and even fatal symptoms are the consequence.

Particular attention therefore should be paid to this important, and salutary discharge, by daily washing, and cleansing the parts; by a due application of soft linnen to absorb the moisture; and whenever the discharge abates, or disappears, if dry frictions are not sufficient to renew it; green oil skin; plaister spread with *Burgundy* pitch; or even blistering plaisters should be applied, if these do not effectually answer the purpose, by restoring the discharge.

When the discharge is so sharp, and acrimonious, as to inflame the neck, and neighbouring parts, they should be washed with a  
sponge

*Running behind the Ears of Children, &c.* 315

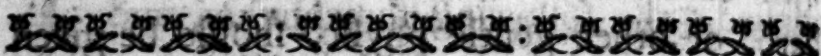
sponge moistened with water gruel, or barley water, wherein linseed, or marshmallows are boiled; and the parts may be dressed with sperma ceti liniment, bees-wax, and oil, or the brown cerate: if white thick sloughs are formed, they should be dressed with pledgits, spread with basilicon, 'till they seporate; and rhubarb, or other gentle physic, should be given to carry off part of the humours.

Excoriations from urine should be treated in the same manner, and the parts should be prevented from rubbing against each other, by the interposition of fine linnen rags, spread with any drying cerate: if they are much inflamed, they may be washed with elder flowers boiled in milk, and rags dipt in the same, may be applied over them, 'till the inflammation is removed; when the parts may be anointed with fullers earth, or as above directed; and proper cooling physic should be given.

Scabs in the face, and head, though salutary in themselves, are often very troublesome to the child; from the itching they occasion, in consequence of the perspiration being checked thereby: no cooling, repelling ointments should be applied; but to abate the itching, the scabs should frequently be washed, and softened with  
milk

### 316 *The Tinea, or scalled Head.*

milk and water, and kept supple, by anointing with fresh lard, or pomatum; purging the child gently at proper intervals: if it arises in consequence of the running behind the ears being stopt, the discharge must be renewed in the manner above related.



### C H A P. LXV.

#### *The Tinea, or scalled Head.*

**T**H E R E are various species of this disorder, some of which, often prove difficult of cure, especially when seated at the root of the hair.

In the slighter degrees of it, the scabs should be softened with emollient washes, and fomentations, made of barley water, linseed, or marsh-mallow decoction; and be covered with rags spread with tar, and sheep suet: this application will promote a running, and separation of the scab, which when removed, you will distinguish of what species it is: for this purpose an oil skin cap may be wore, and the plaister be *Barbadoes* tar, and sulphur.

Sometimes after shaving the head close, the scabs are to be cleansed, by smearing them  
over



over night, with soft soap, and washing it off the next morning with warm water: but when the evil is deep rooted in the scalp, and hair, more powerful remedies must be used, especially if the child be grown up.

For this purpose, different remedies have been applied; the following fomentation, and ointment has often been used successfully: boil an ounce of wormwood leaves, and southern wood, in three pints of water, to a quart; strain off the liquor, and add to it four ounces of soap lees. Wash the parts daily with a sponge dipt in this liquor, made warm, and immediately afterwards, anoint them with some of the following. Take of the white ointment with camphor, three drams, *Barbadoes* tar, one dram, mix them together. Or rags may be spread with a mixture of two ounces of lard, and half an ounce of sulphur vivum finely powdered, after washing the parts with a decoction of wild dock, and elicampane roots.

By some, the ashes of burnt tobacco, are deemed specific; others, use mercurial washes, as the phagadenic water; or mercurial liniments and ointments, suppressing the sprouting flesh with red præcipitate: by a discreet use of these, the cure is generally effected, interposing

### 318 *The Convulsive, or Hooping Cough.*

interposing proper physic to prevent the mercury affecting the jaws.

The dry scurfy kind is generally removed by the following liniment, viz. a dram of white præcipitate, mixed up with an ounce of pomatum, and half a dram of lixiviate tartar: let the parts be anointed twice a day with this; give æthiops mineral for some time, and purges intermediately.

It may be necessary in some constitutions, to apply a seton, or issue in the neck, both to facilitate the cure, and secure the patient from any consequences that may ensue the drying up the humour.



### C H A P. LXVI.

#### *The Convulsive, or Hooping Cough.*

**T**HIS disorder is of the spasmodic kind, and is distinguished from other coughs, by a singular hooping, or noise: it is difficult to say what parts are *principally* affected, whether the lungs, diaphragm, or stomach; they are all perhaps in some measure so, by sympathy of parts; but it should seem, that the stomach,

*The Convulsive, or Hooping Cough.* 319

stomach, is more immediately affected, by the relief the patient finds, by vomiting up at the end of the fit, a quantity of viscid, roapy, heavy phlegm, or inspissated glandular liquor; which could not possibly be so frequently ejected from the lungs of children, or be accumulated there in such quantities.

The most successful method of treating this disorder, seems also to favour this opinion; as those medicines that attenuate the viscid phlegm, discharge it from the stomach, and strengthen this organ at the same time; are found to give the greatest relief, and shorten the duration of this tedious malady.

Gentle vomits are found particularly useful, and should be given once in two, or three days; either of ipecacuana, the antimonial wine, or what has succeeded best with some, white vitriol: rhubarb, or other gentle purges, should also be occasionally given to carry off the offending cause by the bowels; and the bark should be taken in decoction, or substance, three times a day, to strengthen the stomach.

The pectoral, and oily medicines given in other coughs, should in this be totally prohibited, as they increase the viscid matter, and  
relax



320 *The Convulſive, or Hooping Cough.*

relax the glands, and coats of the ſtomach, which ſtand in need of detergent medicines, and ſuch as reſtringe, and brace them up.

When attended with fever, both bleeding, and bliſters may be neceſſary, and when the cough, and ſpafms are violent; twenty, or thirty drops of paregoric elixir may occaſionally be taken; or two, or three ſpoonfuls of a mixture, prepared with fix ounces of the moſch julep, half an ounce of paregoric elixir, and a dram, or two of tincture of valerian; an ammoniac ſolution with caſtor, may be given alſo for this purpoſe, by ſpoonfulls.

Dr. *Fothergill*, recommends the following antimonial compoſition, as a uſeful medicine in this diſorder, viz. half a dram of powder of crabs claws, rubbed well together, with two grains of tartar emetic: one grain, a grain and a half, or two grains of this powder, may be added to five, or ſix of any teſtaceous powder, and given in a ſmall ſpoonful of milk and water, in the forenoon, between breakfast and dinner, to a child of a year old.

If this quantity does not prove ſufficient to excite vomiting, it ſhould be increaſed next day, to ſuch a doſe as will produce this effect; and in this manner, let it be daily repeated about the ſame hour at night, when the fever

is

*The Convulsive, or Hooping Cough.* 321

is vehement; half the former dose of antimonial powder may be given, with a few grains of nitre, and the fever powder, N<sup>o</sup>. xi.

This generally procures an agreeable sweat, and abates the fever: but if this medicine fails to procure a stool, or two daily, a proper quantity of magnesia, may be given at bed time, with the antimonial powder.

When the cough decreases, and every other symptom abates, the puke may be taken only for two days together, and omitted on the third. Every other day will then suffice, and then, once, or twice a week, 'till the cough is wholly gone.

During this process, they are directed to drink asses milk, to eat sparingly of the lightest meats, broth likewise, and milk in any shape. Quantity is strictly to be regarded; for the more, and oftner the stomach is filled to the least degree of oppression, the longer the disease continues, and with the greater violence.

A small quantity of this powder, should be mixt together at once, and care should be taken, that it be kept perfectly dry, and that the tartar emetic be skilfully prepared.

### 322 *The Convulſive, or Hooping Cough.*

Some conſidering this diſorder as principally ſpaſmodic, have adviſed caſtor, and bark every four hours; half the quantity of the former to the latter: or, as more eligible to children, tincture of caſtor may be given with a decoction of bark: ten drops in an ounce of the decoction to a child of ſeven, or eight years old; or ten, or fifteen grains of the powdered bark, with ſix, or eight grains of caſtor, varying the quantity according to the age, and conſtitution.

On this principle, and as a controuler of nervous ſpaſms, and convulſions, muſk is directed by others; and for this purpoſe, the muſk julep alone, may be conveniently given to children: but the antimonialſ, and bark ſeem principally to be relied on.

The anointing the ſpinal bones with rum; or three parts of oil of amber, and one of ſpirit of hartſhorn, is thought to be effectual in this diſorder: poſſibly by ſtrengthening the nerves of the back, which communicate with the parts affected.



## C H A P. LXVI.

*Of the Rickets.*

**T**HIS is a disease peculiar only to children, from the fourth month, to about the fifth, or six years of their age: it may be distinguished by a general weakness, a bloated countenance, a curvature of the bones, and an enlargement of their extremities.

The indications of cure, consist in strengthening the habit, and restoring to their tone, or figure, the parts that may have been distorted.

As the disorder may originally arise from a weak state of the stomach, and bowels, imperfect digestions, and the sending crude chyle into the blood; these organs should be rectified by gentle pukes, and now, and then, a rhubarb purge: but our principal dependance should be on a strengthening diet, steel medicines, the bark, cold bath, and exercise of the body; to which may be added proper frictions on the affected parts.

For this purpose, the bitter chalybeate tincture, N°. xx. may be given; a light infusion

of the bark also; and the *mars saccharatus* of the *Edinburgh* dispensatory, which is an agreeable form of a chalybeate to children, and may be given daily from a drachm to two; three, or four times a day.

The distorted parts, may be restored to their proper figure, by mechanical instruments, adapted to counteract the traction of the muscles.

For the child's common drink, sliced rhubarb may be infused in small beer, with a proper quantity of filings of iron tied up in a rag: it may be made palatable, by adding a few raisons, and is by no means a contemptible remedy; having been often experienced of great utility, if persevered in for a proper time, with the daily use of the cold bath, and frictions.



# C H A P. LXVII.

## *Of Squinting.*

**W**HEN squinting arises from a contraction of the oblique muscles of the eye to the nose, so that when one is shut, the other appears natural; it is a proof there is no other deformity than the mere displacing the

the ball of the eye by this means.—When this is the case, whither the squinting be in one eye, or in both, the following remedy, though a simple one, may successfully be put in practice.

Let a bandage be applied for twenty-four hours alternately over each eye, so that the child is permitted to see with one eye only at a time : by this method, persevered in for some months, when both eyes are affected, the muscles will contract regularly ; and keep constantly in a proper direction ; as in their natural state, the sight is strait forward in both eyes.

If one eye only is affected with squinting, the sound eye should be bound up, and be uncovered as little as possible, and in this case, the cure is often effected in less than a month ; the relaxed muscles recovering their proper tone.

The theory of vision demonstrates the propriety of this method, though too long to be here inserted.

If the ball of the squinting eye was lightly pressed from the nose every day, it would also contribute to overcome this muscular contrac-



tion; and was the child accustomed to read for some time, with convex bodies of horn, tied over his eyes, with a small perforation in the centre, it would confirm the cure, by thus fixing the pupil of the eye, in a direct line.



## C H A P. LXVIII.

*Purging, or Watery Gripes.*

**T**HIS disorder which frequently attends children, proves fatal to some in a short time, as they cannot long support large evacuations.

It is of no small consequence to trace out the cause of the looseness, and to distinguish the original source: thus, in children at the breast, it may arise from the milk of the nurse not agreeing with the child, and turning aigre, or sour, which is known by its curdled state, and acid smell: in this case, the child should totally abstain from it for some days, 'till it is brought to a wholesome state, by regulating the nurse's diet; abstaining from vegetables, and every thing tending to acidity, and obliging her to drink plentifully of lime water, and milk. The child should also feed on small  
broths,

broths, gellies, rice gruel, and take frequently testaceous powders, with rhubarb, or magnesia. When a purging happens with cutting teeth, it is in general salutary, by keeping the body cool, and lowering the fever; and should not be controuled, if it keeps within due bounds.

A dose, or two of rhubarb should ever precede the use of absorbent, and restringent medicines; that the offending cause may be carried off, before the discharge is restrained; least it should be locked up, and confined, by their premature use.

The source of these disorders is generally in their stomachs, and arises from putrid indigestible aliment; and this is frequently distinguished by the smell of their breath, here the prime remedy is undoubtedly a puke; and a grain, more or less of ipecacuana, or a proper quantity of its tincture should instantly be given to remove the original cause: half a grain may be given to a child three weeks old, and so on in proportion; and this quantity may be repeated daily, or even twice a day, so long as viscid matter is thrown off.

When the stools are remarkably green, and watery, it shews a predominancy of bile, and

the preference may then be given to a few drops of the antimonial wine, repeated every six hours, 'till the stools begin visibly to change for the better; and then every eight, or ten hours, 'till they return, to their natural colour and consistence: it may be best to begin with five, or six, and increase them according to their effects and operation.

When the bile, and acrimonious humours are thoroughly carried off, the absorbent, restraining, and starch medicines, may be properly administered.

Thus the chalk julep alone may be frequently given, and when the child is weak, or low, the cardiac confection, compound powder of bole, or extract of logwood, may be joined with it.

When the purging submits not to this method, the *Indian* root may be given by glyster: to a child six weeks, or two months old, eight or ten grains dissolved in two ounces of hartshorn drink, with half a dram of mithridate, or diascordium, may be thrown up twice, or thrice a day, when the purging is profuse,

When the mucus of the bowels is washed off with the purging; glysters should frequently be



be thrown up, to defend them from the acrimony of the humours; and these may be prepared with chickens guts, fat broths, and starch.

Should the belly be hot, and tense, warm cloths should frequently be applied to it, wrung out of hot water, or a decoction of chamomile flowers; and if the pain be very acute, the child may be put into a warm bath, and dry flannels afterwards be applied over the belly.

In case of violent pains in the bowels, *after proper evacuations*, ten, or fifteen grains of mithridate, or *Venice treacle* may occasionally be taken; or two, or three drops of thebaic tincture: but these kind of medicines should be given, and repeated with the utmost caution, as opiates may otherwise prove of the worst consequence.

The chalk julep is made, by mixing half an ounce of the whitest chalk, with three drams of double refined sugar, and one of gum arabic, in a pint of water: crabs eyes, and claws, egg, oyster shell powder, will answer the same purpose; but should be given liberally to correct, and controul the prevailing acidity in the stomach, and bowels of children.

The

The antimonial solution prepared by dissolving one grain of tartar emetic, in three ounces of water, with a little sugar, or syrup; may be given to the quantity of a tea spoonful, and repeated according to its effects, instead of the drops, or powder; and in all cases where the stomach, and bowels require to be speedily emptied of their foul contents, perhaps a more palatable, or efficacious medicine cannot be given, especially, if softened with a little crabs eyes powdered.

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## C H A P. LXIX.

### *The Chicken Pox.*

**T**HIS disease is of importance on account of the small pox, with which it may otherwise be confounded; and so deceive the persons who have had it, into a false security; which may prevent them either from keeping out of the way of the small pox, or from being inoculated.

The chicken pox, and swine pox differ only in name, and in the size of the eruption; the latter being larger than the former.

They

They frequently break out without any manifest illness, or previous sign: but are generally preceded by a little degree of chilliness, lassitude, broken sleep, wandering pains, loss of appetite, and more, or less feverishness for three days.

On the first day of the eruption, they are reddish; on the second, there is on the top of most of them a very small bladder, about the size of a millet seed, this is sometimes full of a watery, and colourless, sometimes of a yellowish liquor, contained between the cuticle and skin. On the second, or, at the farthest, on the third day, from the beginning of the eruption, as many of these pocks, as are not broken, seem arrived at their full maturity; and those which are fullest of that yellow liquor, very much resemble what the genuine small pox are on the fifth, or sixth day; especially where there happens to be a larger space, than ordinary, occupied by the extravasated serum.

If the little bladder, or vesicle, does not burst, which frequently happens; a thin scab is formed at the top of the pock, after the little drop of liquor has become yellow and thick; and



and on the fifth day of the eruption, they are almost all dried, and covered with a slight crust.

The principal marks, by which the chicken pox may be distinguished from the small pox, are, the appearance on the second, or third day from the eruption, of that vesicle full of serum, upon the top of the pock; and the crust, which covers the pocks on the fifth day; at which time those of the small pox, are not at the height of their suppuration.

There is a malignant kind of chicken pock, where the fever and all the previous symptoms, are in a much higher degree, the pocks redder, and spread wider; but they go off, and are distinguished from the small pox by the same marks; and the continuance of the pains, and fever after the eruption; and the degree of both these, though there be not above twenty pocks, are, what scarce ever happen in the small pox.

Remedies are not likely to be much wanted in a disease attended with hardly any inconvenience, and which in so short a time is certainly cured of itself. If the fever however should run high, plentiful dilution with nitre may be necessary, and purging on the termination.

Some

Some few pits are sometimes left after these spurious poxs, where the fluid has been particularly acrimonious; and it has been observed to be contagious about the same time, as the infection lies in the small pox.



## C H A P. LXX.

*Peripneumony.*

**T**HIS is a disorder in the lungs of young children, attended with great stoppage, and difficulty of breathing, it is a complaint of a dangerous nature, and many times irremediable; especially if there be a bad conformation of the chest, or the child be of a strumous habit.

If it arises from cold, and a fever attends, blood must be drawn off, and a blister should be applied to the back, to secure the lungs; for an obstruction, and inflammation of this organ, soon becomes fatal to young children. The fever may be treated with a soft spermaceti emulsion, to which occasionally may be added, either a small quantity of salt of hartshorn, or nitre: if the child be strong, and lusty, a brisk purgative may be of service, but  
at

at all events, let the bowels be kept free, and open.

To dissolve the viscid phlegm in the lungs, attenuants, and expectorating medicines should be given; as a light solution of gum ammoniac, and the squill syrup; or the tartar emetic solution, and antimonial powders mentioned in the Chapter on hooping cough.

After bleeding, and purging, a puke of ipecacuana, is often found to be of great service, by dislodging, and throwing off the glutinous viscosity.



## CH A P. LXXI.

### *Of cutting the Teeth.*

**T**HE lives of almost one half of the children that are lost, before the second year, are perhaps originally owing to the first dentition; as from the third month to that period, the teeth cannot fail to be attended with more or less degree of uneasiness, pain, and inflammation of the gums; on account of the continued state of tension, in which they are kept; and sometimes the unremitted irritation from the sharp points of the teeth underneath.

These



These necessarily produce fever, vomitings, purging, rashes, nervous irritations, convulsions, and a train of other disorders; which principally make such havock among young children.

It is highly necessary therefore, to be particularly attentive to the first protrusion of the milk teeth, in order to mitigate the inflammation; to alleviate the pain, and to remove every impediment thereto.

If the child therefore should be attacked with fever; the body should be kept open by simple glysters, or cooling physic, of soluble tartar and manna: the food should be lessened, and no broth allowed; but the drink may be increased to cool, and dilute the blood; a small quantity of which should be drawn off, when the fever runs high.

But the principal, and most expeditious remedy, is to divide the gums, and membrane enveloping the tooth, in that part that is most prominent, and raised, by the pressure of the shooting tooth, this incision should not be delayed, but made early, on the first appearance of fever, and inflammation: for it is trifling with the disease, to defer the operation, till the gums are considerably elevated, and

and pointed, and ready to push out; since the chief danger, and pain are then at an end.

Nor should the scarifications be performed in a superficial manner, but be made in a line with the edge of the tooth, and sufficiently large, and deep, to divide the membrane thoroughly, and to grate on the tooth itself; otherwise the operation will be ineffectual: the gums may frequently be rubbed with the mucilage of quince seed, and honey, and moistened often with a sponge wetted in a decoction of poppyheads.

In order to facilitate this task, the child is usually provided with a coral, or other hard body to rub the gums: but this, by no means answers the end proposed; for the rubbing of hard bodies against the gums, so far from softening, must make them hard, and callous; rendering the teeth still more difficult to cut: and the pain more acute and lasting, by increasing the inflammation.

If we follow the traces of instinct, we see the young of the canine species, in cutting their teeth, never gnaw flints, iron, or bones; but always wood, leather, rags, or any other soft substances, which tear to peices, or yield to the impression of their teeth; and as at this  
time

time by a kind of mechanical instinct, children carry every thing, which is put into their hands, up to their mouths; instead of bells, and corals, perhaps they may be more advantageously amused with the dried head of poppies; whose seeds might serve them for a rattle, and the mumbling whose surface, might mitigate the pains of the inflamed gums.

A stick of liquorice, or marshmallows, which it might suck, and chew, might be substituted for this purpose; and both these might be more rationally preferred to that ridiculous, and fashionable bawble, the *anodine necklace*: but custom is an argument, which is with difficulty refuted, to the satisfaction of the vulgar of every rank: to convince such by reason is impossible, and to pursue the dictates of nature, is too often superior to their understanding.

By these means, and giving them dried fruits, crusts of bread, hard cakes, and biscuits, to play with; by softning them in their mouths, they would sometimes swallow part of them; and by being taught early to chew, it would facilitate the cutting of their teeth, and they would wean themselves almost imperceptibly at the same time.



The custom of nurses cutting the gums with their *nails, a sixpenny piece*, or gold ring, cannot be too much condemned; as sometimes the laceration, and bruise thereby occasioned may prove of bad consequence.

But whoever is disposed to be satisfied on this important point, and in whatever relates to the preservation, and comeliness of their own teeth; would do well to consult Mr. *Berdmoré's* ingenious treatise on this subject, where they will meet with much satisfaction, and entertainment on this head.



## CHAP. LXXII.

### *Hysteric, and other Fits.*

**T**HE causes of hysteric fits are so various, obscure, and intricate, that no satisfactory account has been given concerning them.

On the approach of a fit, an oppression of the breast is first perceived, with difficult respiration: the eyes grow dim, the head seems to turn round, the eyes close, and the patients for some time remain senseless; and when they recover, it is with great sighing, and  
anxiety,

anxiety: sometimes the convulsions are so strong, and general, that it is with difficulty, they are held down by four, or five assistants: violent laughter, and profuse weeping, alternately succeed each other; and they frequently complain of pain about the region of the stomach, and of a rising up of a globe into the throat, that seems to threaten suffocation: the urine is always pale and limpid, during the fit, and discharged in great quantity.

The method of treating this disorder during the fit, is to abate the spasms, and convulsions; and to controul the inordinate motion of the animal spirits. If the patient be full, and sanguine, blood should be drawn off; and the medicines best adapted to the above intentions, are those of a strong, foetid, and offensive scent, as asa-foetida, galbanum, garlic: oil of amber, and hartshorn dropt on cotton, should be put into the nostrils, &c. and the feet, and legs should be continued some time in warm water.

The fumes of these, or burnt feathers, paper, leather, &c. may be conveyed also to the nostrils; with spirit of sal ammoniac, or *L'Eau de Luce*; till medicines can be given internally. These may be repeated doses of tinc-

ture of asa-foetida, galbanum, foot, castor, valerian, &c. taken in water, or the camphor julep; with frictions on the legs, arms, and belly. A solution of asa-foetida, galbanum, sagapenum, ammoniacum, and camphor, may be given also jointly, or alone, for this purpose; to which a proper quantity of thebaic tincture may be added, when the convulsions are inordinate, and are with great difficulty controuled.

When a solid substance can be swallowed, ten, or fifteen grains of asa-foetida, and castor, and a grain of opium, may be given, and repeated occasionally: and when the convulsions are chiefly in the bowels, a dram, or more of asa-foetida, or half an ounce of oil of amber, with two, or three grains of opium, may be dissolved in water, and thrown up by glyster.

Cupping glasses applied to the inside of the thighs, have often removed the fit, when all other means have failed; and externally, plaisters, made of galbanum, sagapenum, and asa-foetida, are successfully applyed over the navel, and belly.

In some, a draught of vinegar and water, has controuled the fit, as has also the same remedy



remedy given by glyster : In others, musk has been successfully given, every six hours, to the quantity of twenty, or thirty grains, especially when the muscles have been much convulsed : while to others, the musk joined with the fetid medicines, and camphor, have been found particularly useful ; as ten grains of asa-foetida and musk, and five of camphor. But as these opposite remedies, have different effects on different women, it is impossible to lay down any general directions for their use.

Blisters, and sinapisms to the feet are sometimes necessary, when the head is particularly affected, and the patient continues comatose, and stupid. The animal oil, and that of amber, given to the quantity of twenty, or thirty drops, twice, or thrice a day, is sometimes found successful ; but when these fits are become habitual, inveterate, and confirmed, they often baffle the skill of the most eminent ; and are to be cured only by some change in the constitution, and condition of the patient.

In recent cases however, to prevent returns of the fit, after cleansing the first passages with a vomit, and stomach purges ; proper attention must be paid to the constitution, and menstrual secretion ; so that nature duly performs

her own functions : to obtain which, the digestion must be mended, the circulation invigorated, and the habit of the body in general be confirmed, by exercise, the cold bath, bark, and chalybeates ; either alone, or joined with such antispasmodics, as valerian, camphor, cinabar, and the fetid gums already mentioned, and adapted to the particular constitution. *Vide* Chap. on epilepsy, nervous complaints, and chlorosis.

*As fainting fits* arise from various causes, so they require different treatment. That which arises from fulness in sanguine habits, requires bleeding in the arm : here vinegar should be snuffed up, and the forehead, and temples be bathed therewith ; and two, or three spoonfuls of the same, should be taken, with three, or four times as much water. The patient should be kept quiet, and small diluting liquors should be given with mild acids.

When *fainting* is in consequence of large evacuations, of profuse discharges of blood from the nose, uterus, &c. after applying volatiles to the nose, hot wine mulled with cinnamon, and sugar, should be frequently taken. Compresses dipt in brandy, or aromatic wine should be applied hot to the pit of the stomach :  
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and to the extreme parts, after being well rubbed, should be applied hot tiles, bricks, stone jugs, or bladders filled with hot water; and good broths, gellies, and biscuits soaked in wine, should be taken often in small quantities, to recruit the exhausted vessels.

*Faintings* in consequence of excessive joy, passion, or violent afflictions should be treated by applying strong vinegar to the nose, and gentle anodines to controul the irregular circulation: if the patient be sanguine, and the pulse rapid, some blood should be taken away, and temperate diluters given.

Those *suffocating fits*, that arise from spasms, or stricture of the bronchia, and membranous cells of the lungs, are very alarming, and sometimes suffocate immediately. Bleeding is in general improper, but such antispasmodics as castor, asa-foetida, and valerian, should be given in the fits; or a tea spoonful of tincture of galbanum, with the paregoric elixir, may be given in the camphor julep. Strong frictions may be used to the feet, and legs, and then they may be put into warm water; and if the spasms prove obstinate, recourse must be had to opium, which is sometimes given in considerable quantities on these particular emergencies: for this purpose also, small quantities



tities of ipecacuana are given in the fit, and repeated occasionally; the success attending which is attributed to its known relaxing, and antispasmodic powers.

In the humeral asthma, where the breast is loaded with viscid phlegm, a tea spoonful of oxymel squills should be frequently taken, with a solution of gum ammoniac: but where this remedy is found too nauseous, the pills, N°. xxviii. may supply their place, and blisters must be applied to the legs, when the case proves obstinate: in cases of emergency, where these medicines are not to be obtained, the juice of onions, or pounded garlic, with vinegar and honey may supply their place.

Those *suffocating fits* that arise from the vapour of charcoal, damp wells, mines, and from fermenting liquors; often produce spasms on the lungs, which terminate fatally, if relief is not soon obtained. Their recovery depends on immediately inflating the lungs for some time; in exposing the patient to fresh open air; applying to the nostrils, some volatile salt, or spirit; and afterwards to surround them, as it were, with the steam of vinegar: some blood also should be taken from the arm; tobacco glysters should be thrown up, and when they  
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can swallow, lemonade, or vinegar, and water, with nitre, and other diluents should be frequently taken.

The *incubus*, or *night mare*, which is an uncommon oppression, or weight about the breast, and stomach, so that the patient seems suffocating; is a disorder principally of the stomach; and is in consequence of indigested suppers. It is to be removed in the fit, by drinking a little brandy, or any volatile; and prevented by eating supper early, and of light digestion: in young full habits, bleeding is often necessary.



## C H A P. LXXIII.

## Of Poisons.

**V**ERY dissimilar are the actions of different poisons on the human body: The mineral poisons, as arsenic, sublimate, &c. are more noxious than the vegetables, as they erode the coats of the stomach, and soon induce a perfect mortification: while the weaker salts can make only pungent irritations; which by degrees, produce spasms, and convulsions, till they become general.

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The chief remedy for all poisons taken into the stomach, is to dilute well their acrid salts, and to defend the coats of it, from their pungent acrimony, by pouring down *large quantities* of milk, or warm water, and a quantity of oil to incite vomiting: if this operation is not effected, the throat should be tickled with a feather, or irritated by the finger; or a proper quantity of ipecacuana, white vitriol, or a decoction of tobacco. Some gallons are sometimes necessary for this purpose, which should be continued 'till it is discharged tasteless, and no sensations of the poison, are felt in the stomach.

When the poison has descended into the bowels, they must be defended also from its acrimony, by repeated glysters constantly thrown up, of the same liquors; or emollient decoction of mallows, soft gruels, and fat broths, 'till the pains abate, and are no longer tormenting; when opiates, and cordials may be given, to recruit the patients strength. To controul the force of mineral poisons, Dr. Mead advises the drinking a quantity of lixivium, or a solution of alkaline salts in water.

The plants which produce these unhappy accidents, are *hemlock, nightshade, nux vomica,*

some



some kind of *musbroons*, the seeds of the *stinking iborn apple*, &c. the treatment should be as above; and after the operation of the vomit, the patient should continue to take plenty of water, sweetened with honey, or sugar, to which a considerable quantity of vinegar is added; which is the true antedote, as it were, against these vegetable poisons.

Where opium has been taken, or any medicine, in whose composition it enters, it should be discharged as soon as possible, by vomits of *ipecacuana*. The patient should be bled; and he should snuff up, and inhale the vapour of vinegar; adding it, or other acids, liberally to the water he drinks; and he should take saline draughts frequently, to promote a flow of urine. Diaphoretic, and cordial nervous medicines, with blisters are necessary, by their stimulus, to rouse the animal functions, and divert the humours by sweat: and if the vomit has not occasioned stools, a purge may be necessary to carry off any remains of the opium, which may have passed the pylorus: as a general relaxation, of the whole machine may be the consequence; on recovery, the bark, with vitriol, chalybeates, and the cold bath, will become necessary to recover its pristine state.

C H A P.

## C H A P. LXXIV.

*Diseases of the Ear.*

**W**HEN the ear is attacked with acute pains from taking cold, there is generally more, or less inflammation on the membrane, which lines the cavity, and a fever frequently attends, if the pains be violent. Bleeding is here the prime remedy; the fever should be treated as we have already laid down. Warm milk may be dropt into the ear, and a bread and milk poultice laid warm over it: to disperse the inflammation, and prevent suppuration, the fume of milk, in which elder, and chamomile flowers have been boiled, should be conveyed by a funnel into the ear; and a few drops of warm oil dropt afterwards into it; a hog's bladder filled with the above decoction, and applied to the ear for some time, will contribute to disperse the inflammation; as will the mouth of a bellied jug, filled with the same, and applied close to it.

If notwithstanding these means, the pains continue with great shooting, and throbbing, a suppuration will ensue; which may be forwarded

warded by applying toasted figs, or onions to the ear; and when the matter discharges, the cavity may be cleansed, by daily syringing with warm barley water, honey of roses, and a little tincture of myrrh.

Pains in the ear unattended with inflammation, are often relieved by instilling a few drops of *Bate's* anodine balsam, wetting a piece of cotton in the same; by the application of mithridate included in a rag; and by the fume of tobacco, and stopping up the passage with hot bread: but if it arises from any acrid humour, blisters are necessary to draw it off.

If any live insect gets into the ear, so that it cannot be extracted, it may be destroyed by dropping twice a day into the ear, oil of almonds, and tincture of myrrh: and when extraneous bodies are impacted therein, they may be extracted by fine spring forceps, or scoops, after dropping oil therein: As deafness arises from a variety of causes, it must be differently treated; the most frequent is from wax inspissated by cold, and blocking up the passage: this may readily be discovered by turning the patients ear to the rays of the sun.

If it cannot be scooped out, and is become viscid, it must be thinned by dropping into the



the ear every night, eight, or ten drops of oil of almonds, to which a third, or fourth part of spirit of sal ammoniac is added: for this purpose the soap liniment, and oil is advised, or a tea spoonful of salt water, prepared by dissolving half an ounce of sea salt, in half a pint of spring water: in slight obstructions, warm urine may be instilled every night, or a few drops of onion juice.

After the use of these remedies for a fortnight, if the deafness is not removed, the ear should be syringed with a decoction of rosemary; or warm water, with a little hard soap dissolved in it.

When deafness arises from a relaxation of the drum, or auditory nerve, electricity should be tried. The fumes of a decoction of lavender, and other aromatic herbs, are advised, to be conveyed into the ear with a pipe, and funnel; dropping afterwards into it, a few drops of lavender, or hungary water, with tincture of castor: a few drops of balsam of peru incorporated with a little yolk of an egg, may be introduced daily on a proper tent of lint; and two, or three gum pills, or asa-foetida, may be taken every night, to warm, and invigorate the nervous system; the bark, and chalybeate

chalybeate waters might in these cases be taken to advantage.

In obstinate deafness, vomits are sometimes found useful.



C H A P. LXXV.

*The lock't Jaw.*

**I**N this disorder, the lower jaw is so contracted, that the patient can neither open his mouth, or eat. It arises from various causes, but more frequently from some external injury, as bruises, or laceration of membranes, or a tendon of either finger, or toe; which in general must be amputated, in order to remove the irritation, before even opiates can possibly take effect.

This deplorable malady has, 'till of late, been looked on as incurable: for neither bleeding, purging, blistering, or the most celebrated nervous medicines, have been found of any importance in this disorder: from some recent observations, however, the surprising efficacy of *opiates*, and *warm bathing*, in removing this complaint have been discovered.—That *opiates* alone are capable of keeping the symptoms

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at a stand; and by being gradually increased to very considerable quantities, without intermission, or abatement, are able to subdue this most obstinate, and desperate disease: and this the more easily, if assisted by warm bathing.

It is worth notice, that even ten grains of *opium* have been given in a day, before any notable ground could be gained; without obtaining more sleep than usual, or affecting the head. It is usual to begin only with a grain, which should be repeated every four, or six hours, according to the effects, and exigency of symptoms, and increased accordingly. The warm bath should be used daily, for half an hour at a time, and care should be taken that the body be kept open by glysters; the neck, and jaw may be daily bathed with camphor and opium, dissolved in oil.

The *spasmus cynicus*, and *risus sardonius*, are spasmodic affections of the nerves, and are to be removed by the antispasmodics already mentioned, with a discreet use of opium.



## C H A P. LXXVI.

*Diseases of the Teeth, and Gums.*

**W**HEN the teeth become rotten, they should be extracted, to prevent the breath becoming offensive thereby; and the opposite, and contiguous teeth from partaking the infection. When the rottenness is less considerable, the progress may sometimes be restrained by an ingenious artist, by burning, and filling it with lead, or gold: aqua fortis, vitriol, and such corroding applications are used by some for this purpose, but they are of bad consequence, and should be rejected.

When the patient will not submit to the extraction of a hollow tooth, the cavity should be closed with a pellet of laudanum and camphor, or a little oil of cloves on lint, or cotton: but to prevent the return of pain, the air should be excluded the cavity, by keeping it constantly stopt with wax, mastic, &c.

When inflammation, attended with great pain, affects the membranes of the jaw, we should bleed plentifully, and give cooling phy-

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### 354 *Diseases of the Teeth, and Gums.*

fic, with nitre ; scarify the gums, and apply blisters to the back, and behind the ears ; and let the mouth be constantly moistened with emollient, and attenuating liquors, as decoctions of mallows, and poppy heads, with nitre, and barley water, or infusions of quince, and linseed : which poultices of the latter, may be applied to the cheek.

When pains in the jaws, and teeth, arise from acrid humours settling thereon, or from gouty, or rheumatism causes ; they must be treated with blisters, and purges, to divert the humours, and with medicines peculiar to those disorders : in general, such hot stimulating applications, as will promote a flow of saliva, are of use, as chewing horse-radish, and pelitory root, orris, cloves, camphor, pepper-mint leaves, &c. and a warm plaister, or ginger applied externally, often relieves on such occasions ; but if the pains are violent, recourse should be had to opium, or to *Dover's* powder.

Violent tooth aches of the lower jaw, have been said to be cured, by applying a plaister of meal, the white of an egg, brandy and mastic, at the corner of the jaw, over the spot where the pulsation of the artery may be perceived ; this plaister also laid on the temples,

*Diseases of the Teeth, and Gums.* 355

temples, is said also to relieve excruciating pains of the head. The chewing in the mouth, or rubbing the pained tooth, with the yellow water flower *de Luce*, is said, to drive away the pains of the teeth, as if by charm, from whatever cause it arises; the application of æther also to the tooth immediately, or to the jaw externally, is sometimes attended with the same success.

Swellings in the jaws, and cheeks, are frequently owing to carious, or faulty teeth, and often degenerate into abscesses, or gatherings of matter; and are seldom to be cured, without extracting the tooth: as it is difficult sometimes to discover the affected one, let them be struck seperately with a hard body, and the jarring, and uneasy sensation, will generally make the discovery.

Obstinate, and painful swellings in the cheek, are sometimes no other way to be cured, but by the extraction of one, or two, of the grinders, and perforating the cavity in the cheek bone; unless the matter be discharged by the removal of a faulty tooth. When the gums are soft, and spongy, grow up between the teeth, and bleed on slight pressure, they should either be cut away if putrid, or daily scari-



356 *Diseases of the Teeth, and Gums.*

fied with the point of a lancet; and be encouraged to bleed by gentle suction: let them be washed afterwards with a dram of roach alum, dissolved in a pint of tincture of roses, or port wine, to which an ounce of tincture of myrrh may be added, and twenty drops of spirit of sea salt. When they get well, they should be frequently brushed, which removes alimentary foulness, and is useful by its salutary irritation.

When the scurvy prevails in a great degree, consult the Chapter on that disorder; or take the antimonial wine, or sublimate drops, with sarsaparilla decoction for some time.

Whenever a rough tartarous matter forms on the teeth, it should be removed by proper instruments; as it prevents the close adhesion of the gums to them, and deprives them of their due nourishment: this should be executed by a skilful artist, or much mischief may ensue the *scaling*, as it is called, by the instrument tearing off the enamel therewith.

The utmost care should be taken to avoid acid tinctures, and using rough, gritty powders too frequently, in cleansing the teeth; as the former dissolve the enamel of the teeth; and the latter, by their constant attritions wear it away:

away: when these powders are only used once a month, in order to clear away the tartar more expeditiously, no harm can arise from this sparing use; but by the constant rubbing of coarse emery, scuttle, or pumice stone powders, &c. the enamel is cut away, and the bony part of the tooth exposed; or the surface is so scratched, that the fresh growth of tartarous matter is favoured thereby.

Soft testaceous powders are therefore to be preferred to them, or Mr. *Ruspini's* medicine of Pall Mall, which is the best, and safest which I have experienced.



C H A P. LXXVII.

*Observations on Hemlock.*

**T**HOUGH the success attending the use of hemlock, has by no means been found equal to the sanguine recommendation of the author; yet from some candid accounts lately published, it may be esteemed an useful acquisition; and will assist us in the cure of many diseases, in which the medicines now in use are inadequate auxiliaries. And surely to alleviate those evils, which we cannot cure; to

palliate the distresses of the miserable; and render their lives more comfortable than they otherwise would be, is no trifling consideration.

Though it will by no means cure cancers, or cancerous tumours, yet it has been found to mitigate their pains, check their progress, and change the discharge for the better, in respect both to colour, smell, and consistence.

In scrofulous cases, it has been more successful; its efficacy as a discutient, attenuating, and resolving medicine, having undeniably appeared, on numerous trials.

In corrosive, malignant, putrid, and fordid ulcers, it has been particularly serviceable; in mending the discharge, and disposing the sores to heal, where sublimate had failed.

The method of giving it, may be by dividing two drams of the extract into thirty pills. Adults may begin with two in a morning, two at noon, and three, or four at night; with directions to increase each dose, by the addition of a pill to each, as they can bear it: the quantity varies in different subjects; but it seldom procures any benefit 'till it is given in full doses; this is known by the degree



degree of giddyness it produces; the sickness, and trembling agitation of the body, and laxative stools it procures: here we must stop, 'till none of these effects are felt, and in three, or four days, advance a grain, or two more.

The leaf of the hemlock has been given in substance, and gradually increased, 'till half a dram has been taken twice a day: the juice also has been given from a tea spoonful, to a table spoonful; and by degrees to two table spoonfuls in a day.

It has been used externally with success, by way of poultice, and fomentation, in discussing, and resolving hard swellings of the glands; and brings old callous, inveterate sores to digestion, and a healing state: oatmeal may, for this purpose, be added to the poultice.

As the hemlock frequently occasions sickness of the stomach, and giddyness of the head, some warm aromatic should be given with it; which generally relieves this symptom.



## C H A P. LXXVIII.

*To prevent the bad Effects of severe Frost, and Snow.*

**T**HE moment a person comes into a house, with his hands, and feet benumbed; instead of getting near a fire, he should remain in a cold room, and immediately put his hands, and feet if necessary, into a basin, or pail of water, as cold as can be got; and there let them remain, 'till they begin to glow with warmth; an effect, which, to his surprize, he will perceive in a minute, or two: this is the most effectual method to preserve children from chilblains.

The credibility of this doctrine appears from the following experiment. Take a couple of apples, and expose them to the cold air, 'till they are perfectly frozen; then put one of them into cold water, and in less than a minute, it will be covered all over with sharp transparent spicula, or points, as pungent as needles; and the apple will become soft, and fit for use. Let the other apple be thrown into hot water, and it will be immediately turned into a pulp, and

and be as unfit for service, as if it had been quite rotten. The cold water, it is said, attracts the icy particles, and thereby renders the apple perfectly sound; whereas, the hot water repels, and agitates them, and lacerating the fibres, reduces the apple to a state of rottenness: to put therefore a person frozen, *immediately* in a warm bed, is certain destruction to the parts, or body; which should be moistened with linnen cloths, dipt in freezing water, or chafed gently with snow, until the spicula of the cold are received therein, and the animal heat returns: by this means the juices are restored to their former state of fluidity, and may then be safely put in motion, by frictions, cordials, and stimulating medicines.

A person therefore, frozen with cold, should at first be conveyed into a room, rather cold than hot; and treated as above mentioned, 'till a proper warmth, from a free circulation be excited: the transition to a hotter apartment, and a warm bed should be gradual; and when the vessels are become pervious, warm cordials, and diluting drinks are necessary to restore the blood, and juices, to their natural state of fluidity.

We are told of a Traveller in the Northern Countries, frozen almost to death, who was  
dipt



dipt into cold water, before he was put to bed; and that after the immersion, his body appeared incrufted over with ice: and that it is customary for the inhabitants to rub their hands, ears, and nose with fnow, before they return home, and approach near the fire.



## C H A P. LXXIX.

*The Scurvy.*

**T**HE sea scurvy is a disease very different from that of the land; it depends intirely upon a relaxed state of the solids, and a putrid dissolution of the fluids: the causes are many, such as improper aliment, moist air, an obstructed perspiration, &c.

The symptoms are a torpor, or listlessness to action, a fallow, and bloated countenance, a general weakness, a difficulty of breathing, foetid breath, soft, spongy, and bleeding gums, livid, and black and blue spots upon the skin, swellings in the legs, and contractions of the tendons, faintings, and often sudden death.

To prevent the progress of this distemper, both at sea, and in the camp, the water should be corrected, by mixing vinegar with it; or acidulating

acidulating it with a due quantity of spirit of sea salt, lemon juice, or elixir of vitriol.

The cure, when they can be obtained, principally depends on the free use of vegetable juices, and antiscorbutic plants; as lemons, oranges, tamarinds; the juices of succory, endive, water creasses, scurvy-grass, &c. when the vegetable acids cannot be obtained, the mineral ones, as oil of sulphur, vitriol, spirit of sea salt, as before mentioned, may be used in their stead.

The ingenious Dr. *Macbride*, whose experiments on alimentary mixtures, are well worth consulting; strongly recommends an infusion of malt, for the cure of this distemper at sea, and thinks it bids as fair for the cure, as the juice of any recent vegetable.

From a variety of experiments, he concludes that the property, *common* to all *fresh* vegetables, is, that when mixed with any *animal* substance, and placed in the proper degree of heat, they presently run into *fermentation*; and in the course of it, throw off an elastic vapour, or *spirit*, of suprising activity, endowed with a power of restoring sweetness to *putrid* animal foods: hence he concludes, that those vegetable

vegetable substances, which though not perfectly recent, are yet capable of fermentation, as common malt; if taken in the way of medicine, would in all probability produce similar effects, to those produced by green vegetables; or that the liquor from it, bids as fair to cure the scurvy, as the juice of any recent vegetables: and indeed from some cases lately published, this ingenious conjecture of the Doctor's, seems to be justified by experience.

The infusion, or wort, is to be prepared thus.—Take a quart of ground malt, and pour on it three quarts of boiling water; stir them well, and let the mixture stand close covered up, for three, or four hours; after which, strain off the liquor. It should be brewed in hot weather, every day. A quart, or more of this infusion, is to be drank in the course of twenty-four hours, with some elixir of vitriol drops, if it should purge.

He proposes also to boil the wort up in a panada with biscuit, or some of the dried fruits usually carried to sea, and to make two meals a day of this palatable mess.

In acute putrid diseases, he recommends the same diet, acidulated with lemon, or orange juice,



juice, or with spirit of vitriol.—Cyder, rhenish wine diluted, small acid punch, and all acid, and acescent liquors, with a vegetable diet are proper.

The scurvy at land, is often more troublesome, than dangerous; the hot species is generally removed by the antiscorbutic juices, and a vegetable diet; the cold, by the warm plants, as horse-radish, burdock, mesereon, &c.

When the blood is thin, and acrimonious, the bark, and its decoction, is often successfully given with elixir of vitriol: and in that troublesome disorder in the face, called gutta rosacea, the bark has sometimes had surprising success, when properly persevered in.

In some scorbutic cases, the antimonial wine, taken twice a day, from thirty, to sixty drops, in a draught of sarsaparilla decoction, or lime water, for some months, is an excellent remedy; while in others, *Ward's white drops*, or the *sublimate solution*, will often prove a powerful remedy. When all others fail, Sea water, and bathing is found successful.

When the gums are particularly affected, consult Chap. on diseases of teeth, and gums;

or

366 *The Elephantiasis, or Leprosy.*

or wash with tincture of the bark, and rub them with burnt alum.

To remove the red, livid, and dark spots, that in an inveterate scurvy, are often impressed on the legs, arms, and body; and those indolent indurations, which are often observed; let the parts be well rubbed, two, or three times a day, with the following liniment, viz. Six ounces of *Spanish* soap, two ounces of camphor, three ounces of sal ammoniac, dissolved in a pint of brandy.

But to correct the blood, and juices, and rectify the habit, one, or other of the above remedies, adapted to the particular species of the disorder, and constitution, must be continued for some time: to cleanse the skin, in some slight cutaneous eruptions of the face, salt dissolved in spring water, is a safe, and useful wash.



C H A P. LXXX.

*The Elephantiasis, or Leprosy.*

**T**HE elephantiasis, or leprosy of the *Greeks*, is a frequent disease, though very difficult to cure. The eruptions often cover the whole

*The Elephantiasis, or Leprosy.* 367

whole body, which scale, or rub off with ease: sometimes tubercles, or bumps appear of different sizes, of a red, livid, or copper colour, particularly about the eye brows, the hair of which falls off: the nose, lips, and ears, are frequently swoln, as are the legs to an enormous size, overspread with tubercles, interspersed with deep fissures, sometimes covered with a thick, moist, crusty scab, and often the tubercles ulcerate.

Incipient cases are sometimes known to yield to half a dram of crude antimony taken twice a day, with half a pint of a decoction of elm bark, made by boiling a pound of it, in a sufficient quantity of water, to a gallon. Sometimes antimony, and mercury are best joined, as in *Plummer's* pill; which may be taken with a decoction of the woods; or a strong decoction of sarsaparilla, to which a quarter of an ounce of the mezereon root, may be added to a quart, or three pints in the boiling.

When this last decoction is not given, its place may be supplied by adding two, or three drams of the acid spirit of sea salt to a quart, or three pints of water, with a proper quantity of syrup, or sugar, four ounces of which may be taken with the pills.

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### 368 *The Elephantiasis, or Leprosy.*

The sublimate solution has sometimes been given with success; or a quarter of a grain of sublimate dissolved in a pint of the above decoctions, or gruel, may be taken twice a day, when the bowels are not much affected by this medicine: should griping ensue, it may be divided into four doses, and a scruple, or more of chalk, be taken two, or three times a day, with a few drops of laudanum.

But what is principally depended on by some, is the bark alone, or joined with a third part of saffraass powdered, and given twice, or thrice a day for some months; rubbing the tubercles with an embrocation prepared with half a pint of spirit of wine, an ounce of lixivate tartar, and two drams of spirit of sal ammoniac.

Vipers which were formerly considered as a specific against leprosy, and many other cutaneous disorders, on account of the great quantity of volatile salt, procured from this animal, are now laid aside, as of little or no use; this salt differing not from that of any other animal, and consequently possessing no peculiar virtues.

## C H A P. LXXXI.

*The Psoa, or Itch.*

**T**HIS disease can be communicated no other way than by contact. It is owing to little animalcules burrowing in the skin, which, on examination with a microscope, appear in shape like a crab: the pimples appear all over the body, but particularly between the fingers, and joints, with white watery heads.

The cure consists in destroying them, which is effected by mercury, sulphur, white hellebore, and lime: the sulphur ointment, prepared with a pound of lard, and half a pound of flower of brimstone, and two drams of essence of lemons, is the best, and safest application, rubbed daily into the parts; but its offensiveness is objected to, by delicate patients; and its place is supplied by a strong decoction of white hellebore in water, or the powder mixt up with pomatum.

Mercurial solutions are certainly the neatest; for which purpose, *Ward's* white drop diluted is excellent, in the proportion of one part,

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to four of water; with which the parts may be washed every night: the sublimate solution prepared by dissolving two drams of sublimate, in six ounces of water, with a scruple of crude sal ammoniac, may be used in the same manner, properly diluted.

A strong turbid lime water will have the same effect, by washing the skin with it every night, as is evident by curing dogs of the mange, by dipping in the tanners lime fat.

The following is a very elegant, and effectual ways of curing the itch; mix half an ounce of white precipitate, with two ounces of pomatum, and six drops of essence of lemon, and rub a little on the parts every night; keeping the body open with nitre, cream of tartar, and linitive electary mixt together.

The strong mercurial ointment is sometimes used by rubbing half a dram into the bending of the arms, and hams; but gentle physic should be interposed to prevent salivation. Crude sal ammoniac is added by some to the sulphur ointment; and both sulphur, and the sublimate drops are given internally by others, to diffuse their powers with greater certainty.

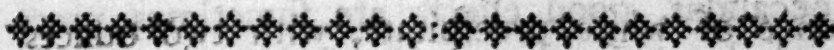
Sometimes



*The Pſora, or Itch.*

371

Sometimes an eruption, not contagious, tho' a good deal ſimilar in appearance to the itch, will appear on the ſkin. *Plummer's* alterative pill, or the following ſolution, are effectual remedies, for this, and many other obſtinate cutaneous diſorders. Diſſolve ten grains of corroſive ſublimatè, in ten ounces of ſmall cinnamon water, and give half an ounce in half a pint of milk and water twice a day. The above ſolution with ſal ammoniac is more perfect, on account of the ſalt, and may be given from three, to ten drops in the ſame manner.



C H A P. LXXXII.

*Of the Gout in the Head, Lungs, and Stomach.*

**W**HEN the gout ſeizes the head, it ſhould be treated as an apoplexy; a large quantity of blood ſhould be taken away by bleeding and cupping; and every thing be done, that can derive the blood and fluids from the head, by purging glyſters, ſtimulating poultices to the feet, bliſters to the back and legs, or to the parts from which the gout revolted.

If the gouty humour fixes on the lungs, blood ſhould immediately be drawn from the arm, and a purging glyſter be inſtantly thrown up:

372 *The Gout in the Head, Lungs, &c.*

the feet should be immersed in warm water, and be well rubbed; and if relief is not procured thereby, two blisters should be applied to the legs, and one between the shoulders.

If the gout affects the stomach and bowels, a good dose of the holy tincture, with spirit of lavender, or that of sena, or rhubarb, should be immediately taken, and repeated, 'till stools are procured: if vomiting attends, and they are rejected, a few drops of laudanum may be joined to them, and they may be given in smaller doses. On these occasions, good effects are sometimes procured, by giving a scruple of philonium, in two ounces of tincture of sena. But, if the symptoms are not soon removed, the feet should be bathed in warm water, and afterwards be wrapt up in bootekins, or poultices made of flower of mustard seed, horse-radish and vinegar; or blisters should be applied to the legs, with the rye poultice to the feet.

In sanguine constitutions, the medicines should not be too heating, nor should usquebaugh, or other such drams, or liquors be given too liberally, under the notion of expelling the gouty matter; for this method has sometimes

sometimes produced a violent fever, and thereby brought the patient into extreme danger.

Two, or three spoonfuls of hiera picra tincture, taken two, or three times a week, for some months, will considerably lessen the gouty fits, and make them at least more bareable in the most inveterate cases: any other stomach purge will have the same effect, by strengthening that organ, promoting digestion, and preventing the assimilation of gouty matter.



C H A P. LXXXIII.

*The Tympany.*

**T**HE tympany is a collection of air in the cavity of the abdomen, or included in the bowels: it carries with it the appearance both of pregnancy, and of the ascites; with this difference, that though, in the latter, the patient cannot lie down, yet here perhaps the horizontal situation is the most advantageous: in this case, no fluctuation of fluids can be felt, but the belly being struck, sounds like a drum, whence its name.

The seat of this disorder, is generally in the intestines, particularly in the colon, as we often



find the patient troubled with an uneasy rumbling of wind round the abdomen, in the exact course of this gut.

The cure is very difficult, on account of the tone of the parts being destroyed by their great distension and relaxation: it is to be attempted by warm stomach purges, such as tincture of sena, ruffus, and the aromatic pill, with a decoction of ginger, made by boiling an ounce in two pints of water to one, the dose four spoonfuls.

To recover the impaired tone of the parts, a decoction of the bark, with that, or other aromatics is proper; glysters of the same, are also necessary; but when the parts are much relaxed, it is with great difficulty their tone is ever perfectly recovered.

External fomentations, and baths, with aromatic herbs, frictions, and bandage seem the principal auxiliaries.

The same method of treatment is necessary for windy disorders of the stomach, when the tone of that organ is impaired by drinking, or debauches in eating: to strengthen the tone of this organ, fifteen, or twenty drops of elixir of vitriol may be added to the bark decoction.

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The Spaw, Piermont, Bath, or Tunbridge waters, will be drank to advantage on the spot, or at meals, with, or without red wine: but above all things, don't let the stomach be overloaded by intemperate meals, or whatever is found to be hard of digestion: here the patient must be his own doctor, and judge from his feelings; and, of course, abstain from whatever he finds disagrees with his constitution.



C H A P. LXXXIV.

*Of Blood Letting.*

**I**T manifestly appears, that by blood letting, the action of the heart, and arteries; the motion, and force of the blood, and with them, the heat of the body, may to any degree, at pleasure be diminished by this evacuation: this has been experimentally proved by the ingenious Dr. Hale.

When the blood is too viscid, or thick, by drawing off a proper quantity of it, the remainder becomes thinner; as it is attenuated by the attrition, and free contraction of the arteries: nor can the loss of this thick blood be immediately repaired by the aliment, as

it requires repeated circulations through the body, before it can assume the form of blood at all.

When the vessels therefore are too full, and the blood too dense, and rich, a moderate bleeding will free the overdistended vessels, and contribute to thin the remainder: and in violent fevers, where the blood is too rapidly, and impetuously propelled, it will afford immediate, and speedy relief, by weakning the action of the heart, and arteries, and of course lessen the heat of the body.

The only criterion we have for repeating bleeding in fevers, &c. is the pulse, which is our best, and surest guide. Whenever it is full, strong, or tense; we may in general, be sure that blood letting is proper; though particular attention should be paid to the pulse of old people, as it frequently will appear hard, and tense, from the mere rigidity of the coats of the arteries.

Where there are real indications for this evacuation, it is not at all material from whence it may be made, so that it comes forth fluently: the absurd doctrine of revulsive, and derivative bleeding, being now pretty generally exploded.

Bleeding



Bleeding should always be used with caution, and it may be better to stop rather short as to quantity, than to exceed; as we can easily repeat the operation, and thereby sink the pulse, when it will not always be in our power to raise it again.

The necessary motives in general for bleeding, are an excess of blood, an inflamed, or feverish state, and sudden injuries to the body by external causes. Thus in all inflammatory disorders whatever, it is a kind of sacrifice to omit it: whether the inflammation attacks the head, chest, belly, or limb.

In apoplexies, and violent pains in the head from fulness; in coughs, sore throat, difficulty of breathing, stitches in the side, spittings of blood, acute pains in the bowels, and kidneys, from cholic, gravel, or stone, especially if attended with fever, bleeding is often of the utmost importance.

But in those of a relaxed habit, and tender nerves, blood should be taken away with caution; as the solids are thereby relaxed, the heat of the body lessened, the circulation retarded, and the strength is diminished by the evacuation.

## C H A P. LXXXV.

*On Diet.*

**W**HEN fevers have run on to a great length, the patient often emerges therefrom greatly emaciated, and requires the assistance of restoratives to recruit the constitution. The strength of nature being greatly weakened, the diet should be prepared of such aliments, as require but little action in the digestive powers. Thus milk, broths, panada, new laid eggs, &c. should be taken often, and in small quantities, otherwise the tender digestive organs being overcharged, will not be able to convert them into wholesome food; in consequence of which, there will be an indigested load on the stomach, which will be converted to putrefaction.

As milk is a chyle ready prepared, and destined by nature, for the immediate use of man, and every species of animals, in their infancy; so when the digestive organs are infeebled, and relaxed, and can receive no other aliments, milk must undoubtedly prove the most nutritious of any we are acquainted with. They differ

differ however much in efficacy, and virtue, from each other; in some the curd, in some the cream, in others, the whey abounds, and excels. Human milk is to be preferred to all others, as it is so near a kin to our own substance; but where the constitution is not too much debilitated, those of asses, cows, or goats, that feed on proper vegetables, are extremely nutritious: They should be drank warm, but never boiled, which evaporates their finer particles, renders them thick, and heavy, and unfit for a tender stomach to digest.

Eggs hold no inconsiderable place as to diet, the white being analagous to the serum of the blood, and is more nutritious, than the yolk; when broke to pieces, and diluted with milk, or barley water, seasoned with a little spice, and sugar, they afford very good nourishment; as they do also when lightly poached.

Broths, are great restoratives, as they contain all the juices of the animal, except blood; but when given to weak people, care should be taken, that they are not prepared too strong: beef tea (made by boiling over a quick fire, for five minutes, a pound of lean beef cut to pieces, in a quart of water, and a few spice, taking



taking off the rising scum, and decanting the clear liquor,) is on this account to be preferred to broths, 'till the stomach grows stronger.

Panada prepared from bread, biscuits, or rusks, with sugar, wine, orange, or lemon juice, occasionally added, is both grateful, as well as nourishing: care should be taken however, that the bread be well fermented, and light, as flower mixed only with water, is indigestible; but when properly fermented with yeast, and well baked, it is readily digested, and becomes a noble food.

Mr. Boyle's chicken emulsion, (prepared by beating the flesh of a boiled chicken, in a marble mortar, with a proper quantity of the liquor, and then passing it through a fine sieve,) is very agreeable to a tender stomach, that nauseates, and cannot digest the meat.

Salep also, is a most excellent restorative, and is to be made very grateful, (after a tea spoonful of the powder has been boiled for a minute, or two, in a pint of water, and strained through a sieve,) by the addition of a little wine, sugar, nutmeg, and lemon peel.

A restorative wine may be prepared thus. Beat the yolks of two eggs to pieces, and add an ounce of sugar, in which three drops of genuine

genuine oil of cinnamon has been rubbed, to which add six ounces of good mountain wine, or old hock; of this two spoonfuls may be taken occasionally.

Mankind take as aliment, all the parts of vegetables, but the most proper are the farinaceous, or mealy seeds, of wheat, barley, rye, oats, rice, millet, &c. Barley is emollient, and was chosen by *Hippocrates*, as proper food in inflammatory distempers; rice is the food perhaps of two thirds of mankind; it is most kindly, and benign to human constitutions, proper for the consumptive, and such as are subject to bleedings; next to rice, is wheat, the bran of which is highly lacescent, and stimulating: therefore, the bread that is not too much purged from it, is more wholesome for some constitutions. Rye is more acid, laxative, and less nourishing, than wheat. Millet is diuretic, deterging, and useful in disorders of the kidneys; Sago also is very nutritious.

The mealy parts of the forementioned plants dissolved in water, make too viscid an aliment to be constantly used: they are made therefore more easy of digestion by fermenting as before observed, and making some of them into bread, which is the lightest, and properest

properest aliment for human bodies, the leaven dividing the mucous parts of the meal.

Those vegetables and animals that come to maturity the soonest, are lightest of digestion. Thus the spring vegetables, as asparagus, strawberries, and some sorts of sallading, are more easily digested than pears, apples, peaches, nectarins; because they have less of the solar fire in them. Among the animals, the common poultry, hares, venison, sheep, kids, rabbits, &c. are much more tender, and readily digested than oxen, cows, &c. because their parts cohere less firmly. Salt water fish is harder to digest than fresh water, because the salt element in which they live, compacts their parts more strongly: eels for want of exercise, however, are fat, slimy, and not easily digested; but whittings, as almost entirely dissoluble in water, are the reverse: veal, and lamb, are more viscid, and don't digest so soon as beef, and mutton.

Of alimentary leaves, the pot herbs afford an excellent nourishment, among these are the cole, or cabbage kind, lettuce, and endive contain a most wholesome juice, and artichoke a rich nutritious one.

Of alimentary roots, turneps, and carrots are very nutritious; and of a fattening quality, as is very manifest in feeding of cattle.

Broths



Broths made of grown animals, are more nourishing than those of young; are already prepared, and easily converted into animal substances: they are proper nourishment for weak bodies, agree perfectly well with them, if not prepared too strong, for then they become as hard to digest as solid flesh.

The two *Exotic teas* in use here, the *green*, and *bohea*, are said to be gathered from the same shrub, but at different seasons of the year; the *bohea* in the spring, on which some *infusion*, perhaps of *Japan earth*, is thrown; the very fine *byson green*, is said to be dried on copper plates, to which its colour is owing, as well as its noxious qualities from the *verdigrease*. The *midling teas* are perhaps the best, as being less adulterated; and when mixed with a third part of milk, drank tepid, in moderate quantities; and not sipped hot, and in profusion, may prove an innocent, and agreeable breakfast. It is perhaps the boiling heat of the water that makes tea so injurious to some, by relaxing the nerves of the stomach.

Coffee, is a grateful liquor to most people; but must be hurtful to dry, bilious constitutions; to the cold, and phlegmatic, it may be beneficial, if not drank in too great a degree

gree of strength, or quantity ; for under such circumstances, it will produce tremors of the nerves, and destroy masculine vigour.

Chocolate, is certainly much the best of these three exotic liquors, its oil seems to be both rich, anodine, and alimentary ; for an oil as soft as that of sweet almonds, can be extracted from the nut, and the *Indians* make bread of it : the weak, and valetudinary should not drink it thick, but diluted with milk ; when it will prove nourishing, and restorative.

We think it necessary to observe, that in general, all vegetables are with more difficulty dissolved, and digested, than animal food ; and consequently are not so proper a food for human kind ; as they create flatulencies, and many of them pass unaltered, as nuts, and some others.

Therefore, after long, and severe fevers, where the patient is emaciated, and the bodily powers have greatly suffered, nothing recovers the strength, and vigour of the sick, so soon as milk, and broths made of animal food, provided the fatty substances are stript, and separated from the meat, before it is boiled.

A mixture of animal, and vegetable food is designed by nature, for those who are in health ; but in debilitated states, where most  
nourishment

nourishment is wanted from least digestion, and the smallest quantity of food, there can be no doubt about the preference of animal diet, to the vegetable: nay, even bread itself, is directed to be sparingly taken, by a very eminent modern physician, where the digestive organs are weak, and disposed to generate crudity, and acidities.

As water is the constant beverage of many, too much care cannot be had, in the choice of the most pure, soft, and wholesome; the pump water in *London*, and other large cities, containing powder of lime stone, &c. which are found prejudicial to many constitutions. River water is to be preferred to some pumps on many accounts; but as it sometimes tastes strongly of weeds, and leaves, it should be *distilled* before it is used: rain, or snow water, is to be preferred to river, or any other natural water, as it is purely elemental.

In the *distillation* of water, if the still holds twenty gallons, the first gallon should be thrown away, as it has a disagreeable taste; and, if any taste remains in the rest, boiling it in an open vessel, will remove it: it should be kept in clean glass, or stone bottles, with glass stopples, and will then keep just the same for ever. As to the wholesomeness of distilled water



for general use, there can be no doubt on't; if we recollect, that all the fresh water in the world, has been distilled by passing through the bowels of the earth, where it is frequently impregnated with the different strata it pervades in its passage.

It is worth observing, that glazed earthen vessels, the glazing of which, is principally lead; and other culinary vessels, lined with a mixture of tin, and lead, may communicate the pernicious qualities of the lead to pickles, and other acid foods; and copper vessels lined with the same composition, wherein the quantity of lead prevails, may do the same: thus, the healths of those who are of a tender constitution, may sometimes be injured by acid sauces, and soups prepared in such vessels; and many of the disorders of the stomach, and bowels may suffer by such insidious enemies, and concealed poisons, when they are little suspected; and lay the foundation of a painful, lingering disease, more formidable than death itself.

Pure tin, unmixed with lead, is not so frequently used, as might be wished; it may be discovered by rubbing the surface with a finger, which contracts a livid, blackish colour, if it contains a mixture of lead; but is not discoloured, when rubbed on pure tin only.

A C O M.

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O F  
S U R G E R Y.

C H A P. I.

*Of Surgery in General.*

✱✱✱ S we mean not in this compendium,  
✱✱ A ✱ to enter minutely into the particu-  
✱✱✱ lar objects of surgery; we shall there-  
fore lay down only some general precepts,  
which the young practitioner should constantly  
have in view, and which should direct his  
judgment on every emergency.

Let him than always consider himself as the  
minister, and assistant of nature, who of herself  
is often equal to her own business, if she is  
not interrupted by officious art.

When the surgeon therefore has removed injuries of real distress, such as fractured skulls, incarcerated hernias, fractured, and dislocated limbs, &c. where she is unequal to the task of restoration; let him be careful that he distresses her not a new, by injurious dressings, and bandages, that may frustrate his original views. And as nature is ever attentive to her own work, the methods she takes to relieve herself, should be particularly studied by the surgeon; whose principal attention should be to remove obstacles, that may thwart her designs, permitting her to co-operate with him.

Let him ever have in view therefore, the releasing membranous strictures, abating tension, and inflammation, and relaxing the parts by emollient applications, and an easy position of the limb, by putting the injured muscles in a state of relaxation; not forgetting repeated bleedings in full habits, with gentle physic, and an abstemious diet.

These are the grand outlines of practical surgery, and should be considered as points of the utmost consequence, to abate and remove pain; which, if neglected, is sure to produce fever, and its train of attendant evils.

When



When the intention is to disperse inflammation, and prevent suppuration, bleed briskly, evacuate without stimulating; cool, and dilute plentifully; apply emollient fomentations, and poultices; and, you have done every thing in the power of art, whatever may be the event: for as to the efficacy of external discutients, their operation is very precarious; and what are called emollients, will frequently be attended with the same events: for too often nature will baffle the surgeons intended skill in this respect, by following her own intentions, to the great mortification, and disappointment of his expectations. Whoever has been attentive to business must admit the justness of these observations: and the young practitioner will hence be guarded against disappointments, which delusive hypotheses, and an unwarranted partiality for external applications, may possibly have led him into. Hence the justness of the poet's observation. *Naturam expellas furcâ licet, &c.*

The pompous parade of business, with the multiplicity of external forms, formerly in use, and consecrated by time, are now renounced by the more candid, and judicious practitioner; for those who have studied nature, have adopted her own laws, and simplicity. Here

certainly is a noble field for genius to expatiate in; but it must be genius only, that can properly contemplate her laws, and regulate the judgment accordingly; a genius, not fetter'd by customs, prejudices, or partialities; but who in opposition to them dares steadily pursue the paths, that nature has chalked out. Many of the practitioners of this country have done honour to themselves on this score, but none more so, than that able and judicious artist Mr. *Pott*, whose daily practice, and writings, clearly elucidate this plan; and to whom we acknowledge ourselves obliged for many of the most useful observations in this our little epitome.

In the dressing abscesses therefore, as this gentleman advises, let not the cavity be crammed with lint; a dossil or two, to keep the lips divided, so as not to interrupt the discharge, will be sufficient; as the sides of it will, by this means, be suffered to collapse by their natural elasticity; the cavity being formed by a distraction, and laceration of fibres, and not by a loss of substance.

The future dressings therefore, may be flat pledgits applied superficially, with a continuation of the soft poultices, 'till the surrounding

ing hardness is thoroughly melted down, and subsided by the digestion. This effected, the healing up of the sore is the work of nature, art having little more to do, if the patients blood be in a healthy state, than in the application of dry lint, to absorb the superfluous juices, the dressing seldom, and exposing it as little as possible to the air.

The treatment of amputated limbs confirms this doctrine; for when the digestion is once established, they require no other dressing, in general, than dry lint to absorb the matter; which then proves the best of balsams, and is superior to all artificial ones; which too often by their greasy relaxing property, produce bloated fungous flesh, which retards the cure, instead of producing the true granulations of nature.

In every disorder however, due attention should be paid to the constitution, in order to investigate the source of the malady; whether it is in consequence of a scorbutic, scrophulous, or venereal taint; which of course will regulate the judgment, and direct the curative indications. In full plethoric habits, bleed, cool, and evacuate; in the lax, and phlegmatic, let the diet be more generous,



and give the bark, which has the power of rectifying the blood, and juices, and of invigorating the whole habit. Without a due attention to these circumstances, external dressings will be applied in vain.

The art of surgery, consists often more in restraining nature's operations, and in suppressing exuberances, and fungi; than in healing, or promoting granulations of flesh: and in the use of applications that will least interfere with the general course of nature.

Accordingly, those medicines, that will act least on the surface of the wound, are often the best; and dry lint only, which acts chiefly as an absorbent, and is the softest medium that can be applied between the rowler, and tender granulations, becomes in effect the best digestive, incarnative, and epulotic: particular circumstances may sometimes impede the operations of nature; but when they are removed by art, the rest should be submitted to her.

We have thrown out these general hints, to caution the young practitioner against too great dependance on external applications solely; and to convince him, that the grand hinge

on

on which practical surgery turns, depends on removing local stricture, and inflammation; an easy position of the part, reducing the œconomy to a state of health, and co-operating with nature in her general views.

In short, though there are, in most cases, certain general indications to direct us; yet, in many, we must be conducted by the particular cause, and state of the disorder; and be attentive to the operations of nature, as our best and safest guide.

The operative part of surgery, indeed, depends on particular address, and manœuvre; and a sagacity in judging with propriety, the necessity of putting them into execution: this depends on so many different circumstances, to be judged of only by the nature of the case, that no particular directions can be laid down: and indeed, as they come not within our intended plan, are here totally omitted.

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C H A P. II.

*Inflammation, and Phlegmon.*

**W**E shall not enter into the proximate cause of inflammations, whither they arise from obstructed vessels; from stimulus  
or

### 394 *Inflammation, and Phlegmon.*

or irritation; or from exudation into the cellular membrane; which last, is generally allowed to be the seat of abscesses, when inflammations terminate in matter.

From whatever causes inflammations arise, they have three ways of terminating, either by dispersion, suppuration, or gangrene. When we mean to resolve, or disperse any inflammation, or swelling; we endeavour, it is said, to give motion to the obstructed fluids, and to thin them so, that they may transpire through the pores, or enter again into the course of circulation: to this end, we bleed, and purge; dilute, and thin the blood with nitre, and the neutral salts; and relax the vessels by fomentations, and soft bread and milk, or linseed, cataplasms; abstaining from all animal meat, and broths.

When the inflammation may be safely dispersed, various other external remedies may be used, as oil of roses with vinegar; mindererus spirit, solutions of sal ammoniac; or its spirit, blended with oil; with soft cerates to the parts, prepared with sperma ceti, white wax, and oil; or equal parts of elder flower ointment, and wax; in short, with any such soft applications, as will relax, and abate the  
tension



tenfion of the fkin : for in fpite of all our dependance on *diffcutients*, if nature is fo difpofed, fuppuration will enfue.

The *Pblegmon*, which is an inflammatory tumour, is of a red, fhining complexion, circumscribed with hardnefs ; ufually attended with throbbing pain, heat, and fever : if it is not critical, or the termination of a fever, we may endeavour to difperfe it by the above methods ; but, if we fucceed not by thefe means, fuppuration muft be promoted by emollient poultices of bread and milk, linfeed meal, &c. Whither matter is produced by extravafated fluids alone, lodged in the cellular membrane, or a diffolution of the veffels, is not very material to our purpofe ; as we know, that to encourage maturation, fuch applications as confine heat, and perfpiration, are neceffary to affift this procefs of nature.

The methods of difcharging the matter, are by cauftic, or incifion, the latter is generally preferred, as the moft rational ; the fkin being thereby preferved, and the deformity of a fcar prevented. When the fimple incifion is made, and the matter difcharged, the lips may be kept divided, by the introduction of a doffil of lint ; but the cavity fhould by no means  
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### 396 *Inflammation, and Pblegmon.*

be crammed with the same, as it would prevent the sides of it from collapsing, or being brought together by their own elastic disposition: for it is worth observing, as before remarked, that here is no loss of substance, or destruction of fibres, but merely a separation, and distraction of them, by the matter which exudes, and formed the cavity. The dressing therefore, should be superficial, with flat pledgits armed with basilicon, and the poultices should be continued 'till the hardness, is melted down, and nature has unloaded the vessels.

The *Anthrax*, or carbuncle, is a violent inflammatory tumour of a malignant disposition. Its appearance, is of a shining fiery red, circumscribed with livid lips, and a blackness sometimes in its centre; the teguments round it, are hard, and very painful; often not coming to suppuration, but the adipose membrane sloughing, and gangrening under the skin.

The method of cure is to cut out the diseased skin, and remove the sloughy, and gangrened part; and by deep incisions, give vent to the vitiated juices. Warm, animated digestives, should then be applied to the sore, with cataplasms of oatmeal, and stale beer, and spirituous fomentations. The bark should

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*Inflammation, and Pblegmon.* 397

be given freely, with anodines when the pain is intense, and cordials when the pulse is low and depressed.

The *Paronchia*, or whitlow, is an exceeding painful inflammation in the extremity of the finger, tending to suppuration: they are of three different kinds; the first, and slightest, is when a humour is deposited on the adipose membrane round the nail: the finger here should be wrapt up in a soft emollient poultice, of bread and milk, or linseed meal wetted with hot water; and as soon as matter, or lymph is formed, the swelling should be opened all round, and the skin be removed: if the nail is not separated, the fore should be dressed with small dossils of lint, pressed down close to the edges of it, to absorb the matter, and prevent its loss; with the usual digestive over the part.

The second species, demands a more particular attention, as it is accompanied from the invasion, with great pain, heat, and throbbing, and takes its rise often from the periosteum originally. The third, and worst species affects also the tendons, and their ligamentary sheaths, inserted into the bones of the last joint of the finger: here the inflamed vessels



### 398 *Inflammation, and Pblegmon.*

sels having no room to dilate, the pain will be so excruciating, as often to cause the most intense fever, and most alarming symptoms.

In full habits, both bleeding, and purging is necessary to abate the fever, and inflammation; and if the pain is not soon releived thereby, with the use of fomentations, and poultices, an incision should be made longitudinally, on each side the nail, to the bone, dividing the ligamentary sheaths, which confine the tendons close to it. If the pain and tumour do not go off, after making these incisions, it is a sign that the inflammation extends farther, and that the capsule of the second internode must also be divided.

If we were to wait for the appearance of matter, before these incisions were made; the bones, tendons, and ligaments might be fouled, and rotten, before it shewed itself externally; or the inflammation running up the capsula of the finger, it might endanger the loss of both finger, and hand: but by early incision, the inflamed stricture is removed, the obstructed vessels unloaded, and the threatening symptoms are dissipated in time, without any suppuration.

*Internal*

*Internal* inflammations, that cannot be dispersed, but terminate in matter, are always of dangerous consequence; particularly those of the cellular membrane, laying under the psoas muscle, which terminate in *lumbal* abscesses.

The matter sometimes makes its way into the cavity of the abdomen; sometimes on the inside the thigh; at others, it appears in the loins, and groin, where there is often a manifest communication, which appears on pressure.

When these collections of matter burst, or are opened externally, the discharge is generally so great as to exhaust the patient, or run him into a consumption: the spinal bones are often affected by it, and the cause is generally from a scrophulous habit, though bruises, and strains in the back, often lay the foundation of the humour fixing there.

Chilblains, and kibes, which arise from obstructions in the circulation from the cold air, are sometimes easier prevented, than cured, when they break: this is best effected by dipping them daily in cold water, and securing them from the impressions of the air, by wearing

400 *Inflammation, and Pblegmon.*

ing constantly thin dogskin gloves. When the itching is troublesome, they may be fomented, and bathed, with a decoction of chamomile flowers; to a quart, or three pints of which, half an ounce of hard soap, and as much crude sal ammoniac may be added, with half a pint of vinegar.—The steam of hot vinegar, is a powerful remedy; and bathing afterwards with mindererus spirit, and camphorated spirit of wine, renders it still more effectual.

Should the swellings break, and ulcerate, they should be well fomented twice a day before dressing; and wrapt up in linnen compresses wetted in the fomentation; and the parts should be kept warm: even laying in bed, is sometimes necessary to effect a cure.

Warts, and corns, may be removed by the knife, caustic, or by ligature with a thread, or horse-hair; or after clipping off the top of the wart with a pair of scissars, the root may be destroyed by a drop of oil of vitriol, or butter of antimony, or by rubbing daily with lunar caustic: but, care should be taken, to limit the action of the caustic from spreading to the sound skin by a defensive plaster with a hole cut in it.

Corns



*Erysipelas, or St. Anthony's Fire.* 401

Corns should be kept free from pressure; the callosity should be softened by macerating often in bran and water; and after the surface is pared off, it should be kept soft and free from pressure, by wearing constantly some emollient plaister, as those of mucilage, soap, the gum, and mercurial; or a plaister may be composed of sal ammoniac and galbanum.

The leaves of houseleek, ground ivy, or purslain dipt in vinegar, are used by some; with the juice of young figs, soap lees, turbid lime water, &c.



C H A P. III.

*Erysipelas, or St. Anthony's Fire.*

**T**HIS swelling is a bilious inflammation, and generally prevails in those constitutions, where bile predominates. It appears of yellowish red complexion, the tumour not circumscribed as the phlegmon; but the skin is tense, and stiff, often inflated like a bladder, particularly when it affects the face, head, and eyelids; the parts sometimes are attended with vesications, or small pustles, filled with a clear water like a burn; and if this humour

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402 *Erysipelas, or St. Anthony's Fire.*

is repelled, or translated to the brain, or breast, it is often attended with the greatest danger. It generally begins with a shivering, which is succeeded by a burning heat, violent head ach, sickness, and vomiting, 'till it makes its appearance on the skin.

The intenseness of the fever, and fulness of the pulse, must regulate the bleedings, and evacuations; but they must not be carried to the height, they are in phlegmons: for, if the pulse be reduced below the standard of health, and flags, we can with difficulty raise it again.

The internal treatment, depends on plentiful dilution with nitre, spirit of sulphur, and cooling physic, or repeated doses of cream of tartar. When the fever runs high, glysters also are necessary; and should the pulse flag, blisters, and warm perspiratives must be given; when a disposition to gangrene appears, the bark, and cardiacs become necessary.

The external treatment depends on warm fomentations, and relaxing applications, but no cooling repellents should be used, least the humour should be drove back to the noble parts: the suppuration of an erysipelas is very different from the phlegmon, the cellular membrane throwing of rotten sloughs, instead of matter, which is often thin, putrid, and acrimonious, and frequently requires fresh openings.

When the head, and face is particularly affected; to the above treatment, blisters should be

be applied to the back, and behind the ears, to discharge the impure serum; the head and face should frequently be fomented, and the parts occasionally dabbed with a sponge squeezed out of a decoction of elder flowers and milk: if vesications, or bladders arise, they may be snipped, and dressed with soft cerate, as sperma ceti and wax, avoiding too greasy applications.

When the humour is repelled on the head, or breast, bleeding, blisters, and evacuations are necessary to draw it off; with stimulating poultices to the feet, and blisters to the legs.

Those who are liable to frequent returns of this distemper, should carefully avoid fat, viscid food, spices, and strong liquors; the diet should consist much of vegetables; by no means omitting the frequent use of cream of tartar; and drinking in the summer months, plenty of whey, with the same.

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#### C H A P. IV.

##### *Ædema.*

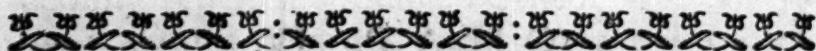
**T**H E œdema is a cold, indolent, soft tumour, which arises from an obstruction of the circulation through the lymphatics; or a watery humour distending the cellular membrane: it proceeds in general from a diseased habit,



habit, and a too poor, and dissolved state of the blood.

The cure depends on the immediate causes; if from an impoverished dropfical disposition, corroborants, cardiacs, and diuretic, with chalybeates and the bark; and such diet and medicines, as will restore the elasticity of the vessels, are proper. *Vide* Chap. on dropfy.

Externally fomentations, and frictions, with strait stockings, or bandages will be proper: and if the swelling arises in consequence of some chirurgical disease, as the pressure of some tumor, or extraneous body, they must be removed. When the swelling does not yield to these means; relief may be given by the application of blisters, or making punctures to discharge the water from the adipose cells; but, care must be taken, to prevent a gangrene by the application of fomentations, and warm digestives: for the treatment of white swellings in the joints, *Vide* Chap. on scrophula.



## C H A P. V:

### *Scbirrus.*

**T**HIS is a hard, unequal tumor, with little, or no pain, seated in some glandular, or membranous part, which often degenerates into a cancer.

To

To dissolve, or disperse it, mercurial cerates, and frictions, with gentle purges, accompanied with a strong decoction of sarsaparilla, are sometimes successful. Fomentations, and discutient poultices, and plaisters, are also recommended; particularly, those of hemlock; with the same medicine taken internally: antimonial, and mercurial medicines combined, are likewise given for this purpose, as *Plummer's* pill, &c.

When this method fails, as too often it does, in dissolving the hardened tumor, and it begins to be attended with itching, and transient pains; the alarm should be taken, and it should be removed in time, before it degenerates into a cancer, which too frequently happens.

When the tumour is to be removed, the preference undoubtedly, should be given to the knife; both on account of the shortness of the pain, and confinement, as well as the seamliness of the cicatrix, or scar.



## C H A P. VI.

### *Gangrene, or Mortification.*

**M**ortification is usually divided into gangrene, and sphacelus; the first is an incipient mortification in a fleshy part, arising from a suppressed circulation; the last is a  
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habit, and a too poor, and dissolved state of the blood.

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406 *Gangrene, or Mortification.*

complete mortification, extending even to the bone; where there is an intire stagnation of the blood, and other circulating fluids, which are become putrid.

As mortifications arise from various causes, their treatment must be different. Thus, where too great inflammation is the disposing cause, and the pulse is full and hard; evacuations, and resolving emollients are proper, in order to lessen the weight, and quantity of blood; with such medicines as will attenuate the obstructed fluids, before they become putrid.— When it arises from weak solids, and vitiated fluids, warm stimulating applications must be used externally, assisted by internals that will invigorate the habit, and prevent the putrefaction of the fluids; among which the bark is chiefly celebrated for this purpose, to which, warm cordial medicines may occasionally be joined, to correct the putrefaction: some use it also externally.

It may be necessary to observe here, that the bark is not to be promiscuously given in all mortifications; for where there is too great fulness in the habit, or too great strength, and contractile force of the solids, and with inflammatory tenacity, and sizyness of the blood, it may be productive of bad consequences: in some cases therefore, nitre, or the neutral salts should be mixt with it.

When an inflammation terminates not by resolution, or matter; the obstruction in the  
vessels

vessels is so great, that a stagnation of the blood, and circulating fluids ensues: the symptoms of this change, are the bright redness of the part, to a dark livid complexion; the sudden abatement of pain, to a dull sensibility; the tumour subsides, the tension goes off, and vesications arise, filled with a serous ichor, and a remarkable crepitus is distinguished.

In such cases, the parts must be scarified to the quick, in order to abate the tension of the vessels, and to give a free discharge to the putrid serum. Nature is then to be assisted by dressing the gangrenous parts with animated digestives, spirituous fomentations, and strong beer poultices, with *London* treacle; to keep up the circulation, strengthen the vessels, and facilitate the separation of the dead from the living parts; which is effected by the impulse of the circulating fluids, and is assisted by a solution of quicksilver in aqua fortis: for this purpose, the diet should be generous, and the patient be supported by cordial medicines, 'till the mortification separates, and the sloughs are thrown off.

When mortifications arise from an internal cause, the bark must be liberally given, to which camphor, or snake root may occasionally be added in some languid constitutions.

When amputation becomes necessary, there should be a *complete separation* of the mortified part, before it is attempted; for you can-



not always judge of the extent of the internal gangrene, by the external appearance on the skin.



## C H A P. VII.

### *Wounds in general.*

**W**OUNDS may be divided into those, made by simple incision, those by laceration, those by contusion, and those inflicted by venemous animals.

In simple incised wounds, after the bleeding is stopt, union should be obtained as soon as possible, by bringing the lips into contact, by means of future, or bandage. Though, stitching of wounds with the needle, is at present much decryed by many, who prefer the dry future on all occasions; yet, they are undoubtedly often of great service; nay, absolutely necessary, in many cases, when judiously applied.

The future should not be made use of, in the neck, and face of women, or wherever we wish to preserve beauty; as the marks of the needle, add to the deformity of the scar. In such cases the dry future, or slips of adhesive plaister applied over the wound, and supported by plaister comprefs, and the uniting bandage, is to be preferred.

In large, deep muscular wounds, the needle and thread may be applied to advantage, in order to bring the parts nearer together; the  
inflamm-

inflammation sometimes attending them, may be avoided, by making the bow knot, so as to be loosened at pleasure.

Though *lacerated wounds* will not always unite, by what is called the first intention ; yet, even in these cases, the future may be usefully employed, by bringing the parts nearer together ; as in those of the scalp, where the dry future can be of little use, from the discharge, and moisture preventing their adhesion : though the future is prohibited by many, in wounds of the scalp, yet, when even the skull has been denuded, and the flap returned, and secured by a stitch, or two, it frequently heals up, without any exolifation, when the lips are thus kept together.

In *punctures* of the scalp, where the aponeurosis, or pericranium have been wounded ; if an inflammation, or erysipelas ensues, which submits not to fomentations, emollient poultices, and the antiphlogistic treatment ; that membrane must be divided to the bone, in order to set the parts at liberty.

In *contused wounds*, where the circulation is in some measure interrupted, the parts should be brought as near in contact, as the case will admit ; and a good digestion should be obtained by fomentations, and soft dressings. Where the contusion is not great, the future may be admitted, to bring the lips nearer together, that the division may be the sooner closed, and the cure thereby expedited with a less unsightly scar.

*Gunshot*

*Gunshot wounds* should be considered, as the worst sort of contused, and lacerated wounds: should the external opening be small, it should be enlarged, in order to extract foreign bodies, and favour the discharge of the sloughs, formed by the contusion of the ball. If the ball can easily be extracted by the fingers, or a counter opening, it may be thus removed, but no poking with forceps should be used. The treatment should be that of contused wounds, by soft poultices, with warm digestives, and fomentations. Where mortification is apprehended, and the patient of a lax habit, the bark may be given to advantage.

When *tendons* are wounded, they often prove troublesome in some bilious habit; and should be treated with the cooling method; soft dressing, and a relaxed, and easy position of the part: when they are divided, they should be brought into contact, and kept so by proper bandage, and a favourable position of the limb, so that they cannot recede.

*Wounds of the joints*, require particular attention, on account of the inflammation that attends these tendinous, and membranous parts: the *teguments* may be closed, to prevent the admission of the air, and the joint should be kept wrapt up in soft poultices, after fomenting twice a day; repeated bleedings, with nitrous, and cooling physic, are absolutely necessary, to prevent both fever, pain, spasms, and

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and local inflammation ; to which should be subjoined a severe regimen, and total abstinence from animal food. As soon as the joint will bear a bandage, in order to restrain the *synovial* discharge, compresses wetted in a decoction of oak bark, and alum, or sal ammoniac and vinegar, may be bound on, with such degree of pressure as can be admitted without pain : the bark is successfully given on these occasions.

Wounds, and stabs of the thorax, and abdomen, that do not penetrate the cavities, are to be treated with the dry future, like other wounds, restraining the motion of the belly, and chest, by flannel rowlers, or bandages. If on examination with the probe, or bougie, they are found to penetrate ; the wound, if small, may be enlarged, to facilitate the discharge *ab intra*.

To prevent inflammation, bleed largely, and observe a strict regimen ; especially, if there be any internal bleeding. If there should be a discharge from the cavities, the external wound may be kept open by bougies, or hollow tents ; if the intercostal artery be opened, it may be secured by the curved needle ; if the large intestines be wounded, they may be closed by the glovers stitch, leaving the thread out of the wound. Should the intestine be mortified, cut off the gangrened part, and stitch the margin of the sound intestine to the lips of the wound.

When

When the intestines protrude, let them be immediately returned into the warm abdomen, and relax the muscles, by raising the hips, and shoulders with pillows; but, if they have long been exposed to the air; foment them with milk and brandy, or warm wine. If the stricture will not admit of an easy return, enlarge it by dilating with a curved knife on your finger.

If the *omentum* protrudes, and is in a condition to be returned with safety, which may be known by its moisture, warmth, and degree of redness, denoting vitality, let it be instantly returned; but should it be grown cold, hard, and ill coloured, and in a state of mortification, let the unsound part be removed, and return the rest into the abdomen without a ligature. If the wound in the abdomen, be longitudinal, it may be treated with the dry future, and kept closed by the uniting bandage; but, if it be oblique, or transverse, so large as to suffer a large packet of the intestines to protrude, the interrupted future must be used.

When *thorns, splinters, glass*; or, any pointed substances are lodged in the skin, or flesh, the wound should be enlarged for their extraction, before inflammation is produced: but, if it has been neglected, emollient pultices must be applied to supple, and relax the parts, in order to facilitate the extraction.

When

When a *nerve*, or *tendon* is half divided, and attended with great pain, the total division becomes necessary, dressing with warm balsam of peru, pultices, &c.—Wounds of the *lymphatics*, from whence there is sometimes an abundant discharge, should be dressed with lint, or puff ball, dipt in alcohol vini, or a solution of alum, and sugar of lead in lime water, and spirits of wine: these applications with good compresses, and, but seldom dressing, will generally answer the purpose; if not, the needle and thread, may be used: but when this limpid effusion arises from a wound of the *parotid*, or other *salivary glands*, the above treatment must be continued, 'till the vessels collapse, and the generation of flesh stops the leak: but, if the stream still flows externally, it must be diverted into the mouth, by a seton of thread.

These lymphatics, frequently inflame, and may be traced like a small chord in the cellular membrane, running up to the arm-pit, or groin. An emollient embrocation with camphor, with fomentations, and poultices generally disperse them.

After the removal of extraneous bodies, and bringing the lips of the wound as near in contact as possible, the most simple treatment is the best: the only applications, generally necessary at first, are dry lint, and a pledgit of soft tow, or linnen cloth, spread with any soft digestive, as basilicon, or the white cerate; which



which should not be removed 'till it comes off easily. All the celebrated balsams, and healing salves for this purpose, are in a healthy constitution, ridiculous; as it is nature that furnishes the best balsam, and performs herself the cure, which is attributed to the medicine: the chief business of the surgeon therefore, is to suppress only her luxuriances; to apply soft compress, and bandage; and to place the part, or member in the most easy position.

When wounds in bad habits of body, appear foul, putrid, and gleeing, the blood and juices must be rectified by diet, and medicine: for, the latter, nothing is more efficacious than the bark, with elixir of vitriol, when no particular circumstance prohibits the use. In a loose flabby state of a wound, or ulcer, the dressing for some time, may be pledgits pressed out of a decoction of bark, and walnut leaves, to which a little tincture of myrrh, and honey of roses, may be added: for this purpose also, to half a pint of lime water, two ounces of tincture of bark, and one of tincture of myrrh may be mixed.

There are certainly abundance of cases, in which different applications will have their several uses; but, these are when wounds degenerate into ulcers; the particular treatment of which, will be explained in the subsequent Chapter on ulcers.

The

The medicines in general may be Unguent. basilicon: vel e gum elemi alone, or softened down with elder flower ointment: the following samaritan balsam, may be used for this purpose. Boil half a pint of mountain wine, and the same quantity of oil of olives together, 'till half is consumed; then add two ounces of arcæus liniment, and the same of balsam of copivi, strain off, and keep in a wide mouth phial.

If too much inflammation attends wounds, bleeding, lenient purges, and a cooling regimen, with emollient fomentations, and poultices must be made use of. If pain arises in consequence of a partial division of a nerve, or tendon, they must be totally divided; the position of the limb must be changed; the muscles relaxed; and if these means answer not the purpose, opiates must be given to palliate, and assuage the violence of the pain, 'till the cause can be effectually removed.



C H A P. VIII.

*Wounds of the Blood Vessels.*

**W***Ounds of the blood vessels*, are to be variously treated, according to their magnitude, and situation. Arterial bleedings are best secured by the needle, when they can be got at; for which purpose the wound should sometimes

## 416 *Wounds of the Blood Vessels.*

times be enlarged, when the artery is retracted. When the radial, or carpal artery is punctured, the needle should be passed perpendicularly downward, and pretty deep, endeavouring to make as small a curve as possible, as the artery lies near the bone. The temporal artery may be secured by compression and bandage, as there is a bone to counteract the pressure.

Whenever this advantage offers, styptics may be trusted to, as buttons of lint dipt in solutions of vitriol, or a strong tincture of galls, alum, &c. for this purpose also, colcothar, bole, flower with a fifth part of blue vitriol, puff ball, sponge, agaric, and dry lint may be used; which latter, supported by chewed paper, sponge, peices of card, thin sheet lead, with pyramidial compress, and a due degree of pressure, may answer the intention of the best; for without due attention to this circumstance, none are to be depended on, in bleedings from any considerable vessel: the pressure however, should affect the adjacent parts as little as possible, a counter compress therefore on the opposite side is often usefully employed, with a double head rowler slit, to prevent its slipping.

Neither *escharotics*, or *actual cautery*, should ever be used, when the ligature, or compression can take place; as on the separation of the eschar formed by them, the bleeding is renewed: the fall of it however may be retarded



tarded by the application of ardent spirits, puff ball, or buff leather.

Bleedings, from the extraction of teeth, are often difficult to stop, and sometimes require the actual cautery: but, in general, they may be restrained by small dossils of lint, sponge, or agaric, with which the socket should be filled up; over which graduated compresses should be applied, so that the opposite teeth, or jaw may bear against them, when tied together: on this compression, reliance is chiefly to be had; though, sometimes, when the artery is withdrawn into the socket, or a scale of bone forms an arch over it, the compression will not succeed, without the insertion, first of a pellet of soft wax, to fill up the interstice: the same method may be used to stop bleeding after tapping; by introducing into the puncture, bougies softened, and formed to the size of the trochar, which should be retained with the usual bandage.

When the *external carotid*, or *internal jugular* are opened, by enlarging the wound, there is a possibility of securing those vessels by ligature; but, if this be found impracticable, after the application of sponge, and proper compress, pressure must be depended on with the fingers; and to make the force more equal, some solid body, well adapted, should be placed next the compress: there must be a succession of proper assistants to relieve each other, as long as it shall be necessary.

When the *temporal artery* is wounded, the bleeding is easily stopt by compress and bandage, the bone of the skull making a counter pressure.

*Bleedings of the nose* are sometimes restrained with difficulty, especially if they happen in hot weather, from external injuries; in young full constitutions; or when they arise from a broken texture of blood. As they are often salutary, they should not be restrained, 'till they become profuse, and threaten danger by their long continuance; particularly those bleedings that supervene inflammatory fevers, and often prove critical.

When it becomes necessary to put a stop to the bleeding, let the patient be put in a cool place, and introduce a proper sized dossil of lint dipped in vinegar, and rowled afterwards in bole, colcothar, or flower, with about a sixth part of roman vitriol added: this dossil must be conveyed over the bleeding vessel, so that it be kept in contact with it, or the blood will flow backwards into the mouth. A solution of white vitriol, a dram to an ounce, or a strong tincture of galls, may be used for this purpose: but when the bleeding arises from a vessel situated high up in the nostril, it may be applied by a quill, or flexible piece of wood, and then withdrawn, leaving the dossil behind.

In some cases, the tents should be of whalebone, or bougies, with long lint wound round them,

them, after being jagged to prevent its slipping off: these should be gently introduced into the whole extent of the passage, to the posterior nostril, and there left for some days, till they are so loose, as to be extracted without force.

Before the introduction of the tents, bougies should be passed quite through, to open the canals, and direct the length, and curvature requisite to be given them, by which means they may be passed with little difficulty.

If notwithstanding the bleeding, the pulse be full, blood should be taken away, even to fainting; and plenty of nitre should be given with cooling acids, as imperial water, lemonade, or drinks acidulated with vinegar, or spirit of vitriol.

Ligatures bound tight on the arms, where they are applied in bleeding, and on the thighs above knee, are sometimes used with success; by preventing the reflux of the blood from the extremities, and accumulating it there.

Compresses, or napkins dipt in vinegar, water, and salt petre, should be constantly applied to the forehead, and the nostrils should be kept pretty strongly pressed together, with the finger, and thumb, upon a compress dipt in the same, and renewed as it grows warm, for some hours: the same liquor may frequently be held in the mouth, to cool the posterior



nostril, and to prevent any inconvenience from the solution of vitriol, falling into the throat. Napkins wetted in the same, are sometimes successfully applied to the scrotum; and twenty drops of laudanum, may be given, to abate the tumult in the blood, or apprehension of mind.

When the bleeding arises from the broken texture of blood, the bark, and elixir of vitriol should be given liberally, with tincture of roses; to which alum, and japan earth may be joined, on particular emergencies.

When the *intercostal artery* is opened, it may be restrained, as before observed, by the ligature, and needle well curved; the artery not lying so concealed in the sulcus of the rib in the living, as is seen in an injected preparation. Another method recommended to suppress this hæmorrhage, is tying a piece of linnen, rowled up into a cylinder, in the middle of a strong waxed thread; one end of which being passed round the rib by a needle, a compress is drawn over the sulcus, in the lower end of the rib; and then by tying the thread hard round the bone, by that means the intercostal artery, and vein, are compressed.

*Bleeding from internal piles*, requires the ligature, when the vessel can be got at: or doffils of lint may be applied, dipt in a solution of vitriol, or tincture of galls, and retained with the

the finger : when the bleeding is out of the reach of applications, a decoction of the latter, or of oak bark, roses, and alum may be injected.

*Cancerous bleedings*, require the mildest kind of *styptics*, that the cancer may not be exasperated thereby : for this purpose, bole, flower, and alum, with the application of puff ball, sponge, or agaric, with gentle compression, will generally succeed : but if any considerable artery gives way, recourse must be had to the needle and thread, or actual cautery.

As to *internal bleedings from the stomach, lungs, and kidneys*, perhaps the best styptic is sometimes the lancet ; the grand point being to keep the bleeding vessel empty, that the aperture may contract, and close : to keep the body also cool ; and to abate, and restrain the motion of the blood, by acids, and gentle opiates : for this purpose therefore, repeated bleedings become necessary, with the bark, alum, and nitre, to cool the blood, and strengthen the constitution in general.

It is much to be feared, that styptic medicines given internally, do not exert their efficacy on the ruptured vessel, as could be wished ; their power being lost before their arrival at the injured part, if at any distance from the stomach : so that the good effects attributed to them, may be owing to the col-

lapping of the vessel, after a large effusion, or a plentiful evacuation by bleeding.

In the stomach, however, they may come into immediate contact with the ruptured vessel: and therefore after an effusion of blood from this organ, if a draught of cold water and vinegar, does not restrain the bleeding, more powerful styptics may be employed, as alum, and nutmeg; the styptic powder; nettle juice; tinctures of japan, and roses; drinks acidulated with spirit of vitriol; the bark, and rhubarb: not forgetting repeated bleedings in the arm, or foot, when the age and constitution of the patient, will admit of it. Uterine hæmorrhages, and bleeding from the navel of children, have been already treated of.

As the union of the *hair lip*, after paring away the edges, depends on treating it like a fresh wound, we shall insert *M. Lewis's* method of closing it without needles. After cutting with a knife, or scissors, he unites the lower part by one interrupted suture, to keep it even; the cheeks being then pressed forward by the hands of an assistant, to bring the edges into contact, two plaister compresses are applied on each side the lip, supported by slips of adhesive plaister, and two thick compresses on the cheeks, as substitutes to the assistant's hands; these are to be retained in their situation, by a double head rowler, carried first round the forehead, and then brought  
over



over the ears, across the upper lip, where a slit may be made in each of the rowlers, as in the uniting bandage.

This simple method deserves particular regard, and attention, the *supposed* loss of substance, being nothing more than a defect of union of the parts; and the chasm owing to a retraction of the muscles, as laughing, and crying, most evidently show. Bandage thus supported therefore, supercedes the use of the needles, and obviates the many inconveniencies attendant on them, answering every intention of keeping the parts in contact; which the needles alone will not effect, without the assistance of bandage; and therefore, they are unnecessary, as experience proves.

The best time of closing the hair lip, is immediately on the birth, as the child wants no nourishment, for the first forty-eight hours; and during that time generally sleeps, if it is not disturbed: these must be considered as circumstances favourable for the operation, as the union may be effected in that time.

When there is a double hair lip, the fissure should be closed at different times, the distance of a month, or six weeks, when the first cicatrix is become firm, and strong.



## C H A P. IX.

*Ulcers.*

**U**LCERS are often the consequence of some wound, bruise, or abscess improperly treated; or they may arise from some internal cause, or degeneracy in the blood, and juices. It will often be in vain to pursue the best means of cure, by topical applications, unless we are assisted by internal remedies.

A simple ulcer may, by rest, a regular diet, gentle purges, and the application of proper digestives, with, or without the red præcipitate, be often brought to the state of a clean wound, which will then granulate, and may be cicatrized by the use of dry lint, and cerate; with the occasional application of vitriol, or lunar caustic, if any fungus arises, that submits not to compression by bandage.

When the ulcer is attended with callous hard lips, it is impossible it should heal, 'till these lips are pared away by the knife, or removed by rubbing with the caustic: emollient poultices, are sometimes conducive to this end, by softning the edges; or mercurial liniments, and cerates, applied over the dressings.

When they are accompanied with inflammation and pain, they are to be assisted with fomentations; and linseed, or bread and milk poultices,

poultices, may be applied over the dressings, 'till these symptoms abate: bleeding, and other evacuations, will be necessary, but above all things, rest, and a horizontal position; which last circumstance is of so great importance to the cure of ulcers of the legs, that unless the patient will strictly conform to it, the skill of the surgeon will often avail nothing.

Ulcers of many years standing, are very difficult of cure, and in old people, the cure is often dangerous, so that they should only be reduced into better order, or less compass; but should they be disposed to heal up, issues should be substituted in their room, to prevent any bad consequences from the suppression of the discharge.

In ulcers, where the bone is carious, loose, flabby flesh, will grow above the level of the skin; and 'till the rotten part of the bone be removed, every attempt by escharotics will be only a repetition of pain: the separation of the bone, being a work of nature, we must wait 'till it is thrown off, and be contented to suppress the fungus, with dry dressing compress, and bandage; the exfoliation however may sometimes be assisted by perforating the bone, and the use of the terebra: by which means the granulations of flesh are promoted, and the dead scale pushed off.

In scrophulous ulcers of the glands, this exuberance is very common, and should be restrained



restrained with precipitate medicine, and the above method; but the internal state of the blood and fluids must be corrected before they can heal: for this purpose, calomel may be given in small quantities, with a liberal use of the bark, or sea water.

In all foul ulcers, where the discharge is foetid, and ichorous, the habit pale, and relaxed, the use of the bark is of infinite service; and hardly ever fails to procure a good digestion: it may often be used to advantage externally, to correct their putrid state, by wetting the pledgits in a decoction, or tincture of the same, with lime water and tincture of myrrh.

In gross habits, purging with calomel is necessary; but to correct the blood, and juices, perhaps it is better to give calomel in small quantities, 'till it affects the mouth, and then purge it off; if the patient cannot submit to a gentle spitting, which is often the most certain method, in some obstinate sores.

A strong decoction of sarsaparilla, drank to the quantity of a quart, or three pints a day, is in general, an excellent diet drink; and when the solution, or half a grain of sublimate is added to that quantity, and taken daily with it, 'tis often attended with singular success.

*Plummer's* pill, given with the above decoction only, or with the compound lime water of the shop, is also an excellent alterative, and corrector of the blood, and juices. *Æthiops* mineral,

mineral, and crude antimony, are successfully used for this purpose, and given with the same.

The sublimate drops may be given also as an alterative, in proportionate quantities; and if the ulcer proves obstinate, and rebellious, it may be dressed with pledgits, pressed out of the same diluted; or with five grains of sublimate, dissolved in ten ounces of water, and one of brandy, and honey of roses.

Ulcers of the tongue, arise often from a sharp point of a tooth, irritating it at every motion: the cure depends on filing down the tooth, or totally removing it: after which, gargles with barley water, and honey will heal up the ulcers. Soft mucilages are also proper for this purpose.

Cancerous ulcers that cannot be extirpated, should be treated with such dressings as prove the easiest to the sore: the use of escharotics are not to be used on any pretence, not even precipitate, to promote the separation of the sloughs. Soft cerates of oil and wax, sperma ceti, lapis calaminaris; lotions with saccharum saturni, and other preparations of lead; decoctions of hemlock, &c. in short, after using one, or other of these, the future application is to be left to the choice of the patient. But the chief good is to be acquired by diet, which should be chiefly milk, and vegetables. Issues, manna, and purging waters, once, or twice a week, to keep the  
body

body cool, are all that can be expected; except a constant course of hemlock: *Vide* Chap. on hemlock, and cancers.

As the healing of all sores is from the edges, the surface of them should not be permitted to rise above the level; whenever they do, the edges should be levelled by the vitriol stone, lunar caustic, and bandages, &c.



## C H A P. X.

### *Burns, and Scalds,*

**M**A Y be properly divided into four classes; the first, and slightest is, when the vessels are so far injured, as to cause an inflammation and redness, without a blistering of the part. The second is when the cuticle is raised into a blister, attended with great pain: the third degree is, when the integuments, or flesh are so burnt, as to form a crust, or eschar, which must be cast off by digestion: The fourth, and last degree, is when the fleshy parts are so burnt, and destroyed, as to deprive them of the vital circulation.

In the first class, where the skin remains intire, the parts may be bathed with spirit of wine, and kept constantly moistened with the same: or they may be retained for some time in cold water, and soft linnen rags dipt in the  
same,



same, with salt dissolved in it, may be renewed every quarter of an hour, 'till the pain be intirely removed; for saline, and spirituous applications excel others, while the skin is unbroke: salt alone, or bruised onions, are also successfully applied for this purpose; but embrocations, and dressings with linseed oil, are by some, thought more serviceable.

If the skin is seperated, and bladders are formed, they may be snipt, without removing the skin, and the part be rowled up gently, with bandages dipt in linseed oil, or a mixture of elder flower ointment, softened down with the same: an extempore dressing may also be prepared, by beating up the yolk, and white of an egg, with two, or three spoonfuls of fallad oil: the dressing afterwards may be a cerate of wax and oil, dropping warm milk on the parts at the time of dressing, or fomenting with the same. If the burn has formed eschars, it must be dressed with digestives, as basilicon; but in these sort of sores, the softest, and easiest medicine will prove the best digestive. Great care however should be taken to keep down the fungus, and prevent the deformity of the cicatrix, by healing up smooth from the edges; and this is to be effected by touching them with the vitriol stone, or water, and dressing twice a day, with any drying cerate: the last species is to be treated as a gangrene. *Vide Chap. on gangrene.*

Care

Care should be taken to prevent contraction from burns, by keeping the parts extended on stiff paper, both during, and after the cure, bathing often with neats foot oil.

In case of much pain, and inflammation, repeated bleedings, with gentle purges, are absolutely necessary, with opiates, and soft emollient poultices. If fever ensues, nitre, with the antiphlogestic method must be pursued. If the burn be occasioned by gunpowder, the particles, if possible, are to be extracted, or picked out, to prevent an indelible mark, which in the face might prove a deformity.



## C H A P. XI.

*Shingles, Herpes, and Cutaneous Eruptions.*

**T**HE *herpes miliaris*, or shingles, are a number of small eruptions, terminating in watery bladders, with redness round them: they appear in different parts of the body, but more frequently shew themselves in clusters about the waist.

Before they appear, they often occasion great pain, and a smart fever: to favour the eruption therefore the patient should be kept in bed, and drink plenty of whey, with diaphoretics; the pained part may be fomented with milk and water, and bread, and milk poultice may be applied, to facilitate the eruption.

When

When the vesications appear, they must be snipped with scissars, to discharge the ichor; and dressed with the white cerate, or wax and oil, to promote the discharge. Any drying ointment will then compleat the cure.

The *Serpigo*, called tetter, or ring worm, is a cluster of small pustles growing together, attended with considerable itching, and discharging a thin sharp water.

These kind of eruptions, are to be cured by strong vitriolic washes, and mercurial liniments. A dram of white vitriol, or sugar of lead, may be dissolved in three, or four ounces of water for the wash; and two drams of white precipitate, mixed up with an ounce, or more of pomatum for the liniment: when the pustles dry away, proper purges should be given: they are frequently removed also, by anointing with ink.

Eruptions on the skin should be repelled with great caution, and never without purging physic: there are various washes, contrived for these purposes, in which corrosive sublimate has a principal share. Thus to a pint of almond emulsion may be added, two ounces of the sublimate solution, or three, or four grains of the sublimate itself, the quantity of which may be increased, or diminished at pleasure.

Aluminous washes, as the lac virginale, and vinegar of litharge, are often used for these purposes, with the following liniment, to soften  
and



## 432 *Fractures of the Limbs in general.*

and smooth the skin, viz. two drams of bismuth mixed up, with an ounce of pomatum, and a little tartar lixivate; but, as we observed before, great caution should be used in their application, least the repulsion of a humour separated by nature from the blood, should be thrown on any of the nobler parts, to the manifest risk of the patient's life.

To deterge, and cleanse the skin, lixivate liniments, or soaps, may be prepared with tartar, or soap lees diluted with oil; or for a common wash, two, or three ounces of common salt, may be dissolved in a quart of water, and used daily: but without a proper course of internals, as sea water, bark, &c. to correct the blood and juices, externals only will often be both useless, and dangerous.

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## C H A P. XII.

### *Fractures of the Limbs in general.*

**F**Ractures may be divided into three species, *simple*, *compound*, and *complicated*: *simple* where the bone is broke in one place; *compound*, where it is broke in two, or more; and *complicated*, where the fracture is attended with a wound, in the soft parts, which is generally what we mean by the term *compound*.

In order to reduce a fractured bone, we should consider, that the difficulty arises from the

*Fractures of the Limbs in general.* 433

the muscles that surround it, the bone itself making no resistance at all : to favour therefore the reduction, the muscles should be relaxed as much as possible, for when they are on their full stretch, it is with more difficulty completed.

Thus, in an *oblique* fracture of the thigh bone, which is enveloped with strong muscles, the reduction is much easier made, when the knee is bent ; and the bone is best preserved in its true situation, by a proper posture of the limb, between flexion, and extension : in the celebrated hospital of St. *Bartholomew*, after the reduction of the bone, the patient is often laid on his side, with his knee half bent, to favour this muscular relaxation ; and the whole limb, comprehending the joint above, and below, is secured from motion, by splints of such a length, as to take in the whole thigh.

The rising of one end of the bone, above the level, is owing to the weight of the lower limb, pulling down the inferior part of the fracture : so that it is not the upper end that rises, but the lower part that falls, in consequence of this weight : thus, the weight of the scapula, and humerus pulls down one end of the clavicle, so that the part next the sternum, is always uppermost : to preserve the fractured bones therefore in contact, instead of compresses to keep the rising part down, raise the humerus, by keeping the elbow up, and you will obtain this end more effectually ; the same method must be used in fractures

#### 434 *Fractures of the Limbs in general.*

of the neck of the scapula, and its process: and in fractures of the thigh, leg, and arm, when the upper part of the bone rises, as it is said, the lower part should be elevated, for the reasons above given.

The eighteen tail bandage, is undoubtedly to be preferred to the circular, in simple, as well as compound fractures of the leg, and thigh; as it can so readily be removed, without disturbing the limb, by raising it from the pillow; either to inspect the fracture, apply poultices, or to slacken, or tighten it at pleasure: neither of which advantages can be had from the circular rowler, without disturbing the fracture, by raising the limb.

To answer the end of stability, and protection, the splints should be long enough to go from joint to joint, and comprehend the whole limb: when they extend only a little way above, and below the fracture, they act only as compresses; and in oblique fractures press on the edge of the bone, and thus produce irritation, inflammation, and other troublesome symptoms.

In fractures of the *clavicle*, our principal view, in order to keep the ends of the bone in contact, should be to support the whole arm, and to take care to keep the elbow sufficiently raised, without which compresses will be of little service: the shoulders also should be kept back, with proper bandage, to prevent the riding of the bones.

In



*Fractures of the Limbs in general.* 435

In fractures of the *ribs*, the principal attention should be to obviate inflammation, cough, fever, and irritation from the bones, by repeated bleedings, and the antiphlogistic plan; this, with a flannel bandage, and compress, to restrain the action of the thorax in inspiration, to keep the bones together, and prevent their points pricking the muscles and pleura, is the principal business of the surgeon. When the lungs and pleura are wounded, and an emphysematous tumour is produced, which sometimes blows up the whole cellular membrane to an enormous size; proper incisions should be made, to give vent to the imprisoned air; and thick compresses, wetted in vinegar, and spirits, should be rowled tight on the fractured rib, to prevent the further escape of the internal air. Some however think, the best method of removing the air from the thorax, is by the operation of the empyema, when there is danger of suffocation therefrom.

In fractures of the humerus near the joint above, as no splints can be applied; when a proper compress is wound round the fracture, with a sufficient number of circular turns; the rest of the rowler may be employed, in binding the arm close to the body; and the arm, and elbow, must be supported in a proper scarf: the compress may be dipped in the white of an egg broken, with a little flower, and vinegar, to make it adhere, and support the bones.

#### 436 *Fractures of the Limbs in general.*

When the *coracoid* process of the *scapula* is fractured, the arm will fall, and give the appearance of a dislocation: but, on moving the bone with caution, you will perceive this fracture by the crepitation of it under the fingers: another circumstance, to distinguish this fracture, from a subluxation, is the being able to put the elbow to the side, which can't be fairly done, when the head of the humerus is in the axilla. This fracture requires nothing more than keeping the muscles quiet, and the head of the humerus pressed upwards against the process, by properly supporting the elbow in a sling, with a compress in the axilla.

In fractures of the *olecranon*, the arm must be extended to bring the bones in contact; and to keep them together, the elbow must not be flexed, but be kept extended by proper splints rowled on for that purpose: this position must be preserved 'till the bones are thoroughly united.

A fracture of the condyl of the humerus, or head of the radius, is often attended with great difficulty to replace, especially when it is thrown before the inside of the ulna, so as to lie in the bend of the arm, and obstruct the flexion of the joint: the consequence is often an ankylosis, or a very obstructed motion of the joint: to prevent the bones being thrown forward, when the swelling, and inflammation is subsided, and the bones reduced to their proper situation; they should

be

*Fractures of the Limbs in general.* 437

be kept so by flexing the elbow, and applying a thick compress to fill up the inside of the arm, secured by a circular bandage, and the easiest position of the joint. — Great care should be taken in reducing fractures of the *radius*, this bone frequently bending inwards, possibly from the contraction of the *rotundus*, and *quadratus* muscles. In the reduction therefore let the thumb be kept upwards, that the hand be in a perpendicular line with the body, and let the splints be long enough to support the bones throughout.

In fractures of the thigh, as already remarked, the best position is often laying it on one side, with the knee flexed, and supported with pillows: by this method, the muscles are kept relaxed, and at ease, and a stiff joint is prevented.

In transverse fractures of the *Patella*, the separation of the bones is sometimes very considerable, from the retraction of the muscles: the best method of treating this fracture, is to lay the leg strait, and to elevate the heel and foot, so as to relax the extensor muscles: by these means, the upper part of the patella, may be brought down within a fingers breadth of the lower, and there retained by a circular roller applied above, and below the knee, to prevent the upper part receding: it is not necessary to bring them into close contact, as in other fractures. The longitudinal fracture of this bone, need be treated only as a contusion, and inflammation.



438 *Fractures of the Limbs in general.*

Fractures of the *Fibula*, require only confinement to bed, a simple bandage, and a relaxed position of the limb, 'till the bone unites. As it is supported by the tibia, it can't get into a wrong position, therefore requires no splints.

In fractures of the *Tibia*, when the leg is much bruised, or swoln, it may be necessary, after bleeding to foment, and to wrap it up in a poultice, 'till the swelling is abated, and the tension removed: to effect which, when the bones are put together, it is often best to leave it in a relaxed position, bent at the knee, and laying on the side: in many cases, particularly in some oblique fractures, it is much better to lay it strait on the heel; the proper position of the foot, and ancle, the heel, and tendo achilles, being carefully attended to; as on the due elevation, and support of these parts, the riding of the bone is prevented, and ease procured.

It is worth remark, that when the *fibula* is fractured one, or two inches above the ancle, the *Tibia* is generally forced off the *Astragalus*, and sometimes passes through the burfal ligament, and integuments: when a splinter of bone protrudes through the skin, and is reduced with difficulty, it is better to inlarge the wound, than use great force; and when it runs into a sharp point, a portion of it may be sawed off: fragments of bones should always be removed, when they can be extracted without violence, otherwise they should be left, 'till they are loosened by suppuration.

*Fractions of the Limbs in general.* 439

In *compound fractures*, where the ligaments are lacerated, the joint laid open, and much torn; where the bones are so comminuted, and the limb so crushed, that the circulation cannot be carried on through it; and where the blood vessels are so torn, that they cannot be secured, amputation becomes necessary, and should instantly be performed; or as soon as possible after the accident; before fever, inflammation, tumefaction, or gangrene take place.

If this critical period has been neglected, and the above symptoms are advanced, the amputation must now be postponed, 'till the inflammation is abated, the digestion established, or the gangrene separated; for while the limb continues loaded, and in an inflamed, or gangrenous state, the amputation will be fruitless: The patient therefore must be supported with nutritious diet, and the bark be liberally given, 'till the digestion, and separation is obtained.

As adhesive plaisters, in some constitutions, produce troublesome itchings, and even erysipelas, their place is best supplied by cerates, or liquid epithems, as oxycrate, or vinegar and brandy, &c. and in full habits, where the swelling, inflammation, and tension are great, repeated bleedings, with cooling purges, and an abstemious diet, and regimen, are absolutely necessary, and should be rigorously complied with, 'till those symptoms disappear.



## C H A P. XIII.

*Dislocations.*

**D**ISLOCATIONS will be considered here only in a general light: one principal rule may be laid down, before any attempt to reduction is made, that the limb be put in a flexed state, as some of the muscular, and tendinous parts, must be tightened in consequence of the displacement of the bone. The great difficulty in reducing some dislocations, is thought, by some, to be owing to the *bursal ligament*; which they say, binds round the neck of the bone, and resists the return, after the head has made a slit, and been forced through this ligament: it may without doubt, be ruptured in some cases, but perhaps it is not generally so; and if it was, the head of the humerus being round, the ligament would be torn in various directions, so as to make room for the return of the bone: the great difficulty, and sometimes impossibility of reduction, arises from the universal adhesion of all the parts, in consequence of the inflammation, which a violent displacement of the parts produces: here, the head of the bone does not move alone, but the muscles, and scapula all together.

Dr. *Hunter* is of opinion, that when a dislocation is produced by violence in a healthy

state



state of the joint, the capsular ligament is always lacerated, not simply stretched; and that the difficulty of reduction, in some cases, does not depend on the imaginary contraction of muscles, nor the impossibility in others, on the supposed inspissation of *synovia*; but, that in a simple dislocation, the facility, or difficulty of reduction may probably arise from the nature of the laceration; and that the impossibility of reducing an old dislocation is owing to the union of the lacerated, with the neighbouring parts.

On this account, it has been advised by some, in reducing dislocations of the shoulder, to suspend the whole body by the arm, that the bone might be returned into the socket through the bursal ligament, in the direction it passed out; and that in all dislocations, proper regard should be paid to the nature of the articulation, and to the position of the limb at the time when the accident happened.

Some have imagined, that the impediment to reduction, arose from the overgreat contraction of the muscles, resisting the extension, and preventing the head of the *humerus*, being brought to a right line with the articulating cavity of the *scapula*. Others have thought that the bursal ligament is seldom ruptured; that this ligament is capable of great elongation, from a supposition that it was elastic; and that the frequency of reduced shoulders, falling out again upon motion, proceeded from  
a relaxation

a relaxation of the ligament, or from its not having recovered its proper tone.

In order to operate with propriety, in the reduction of dislocated bones, the surgeon should be well acquainted with the powers, and action of the muscles; which can be learnt only by a careful dissection, and consideration of them: this would convince him that extensions, indiscriminately used, may sometimes be productive of great mischief; and that the use of pulleys, and ambi's, may in many cases also be detrimental.

Particular manœuvres therefore must be put in practice, according to the nature of the dislocation, and the present suggestion of the surgeon; and he should endeavour to relax particular muscles, that they may not resist his efforts to reduction; for according to the extension, different muscles will be put on the stretch, and act accordingly.

Thus, if the arm be not flexed before the reduction of the shoulder, the biceps, and brachiaëus will be kept on full stretch, and prove a strong obstacle to it: the tendons of the *subscapularis*, and *teres minor* muscles, will also prevent the reduction, as they pass obliquely over it, when the extension is made in a horizontal line, or carried downwards; so that in many cases, it may be better to raise the arm upwards, depress the acromion, and

and press the head of the bone in the axilla forward, before the arm is depressed.

Proper attention should be paid to the scapula, that it advances not forward, with the extension of the humerus; to prevent which an assistant may press the neck of the scapula backward, at the same time: the grand business of the surgeon, is to watch the head of the humerus, advancing out of the axilla, and when it has passed in a right line from under the cup of the scapula, it may in general be easily raised, and lodged in the socket. If the elevation be made before the extension is completed, the head of the bone will be pressed up, against the under part of the neck of the scapula; and if the depression of the arm be then suddenly, and forceably made, either the head of the humerus, or cup of the scapula may be broke off: thus, we see the arm may be put in such a direction, as to make the reduction impossible, by the most violent extension; when some gentle turn of the muscles may produce the desired event, by an accidental relaxation.

*In general*, when the head of the humerus has been displaced five, or six weeks, the attempts for reduction are fruitless; though in young subjects, it has succeeded, after a longer space of time; especially when the muscles, and joint, have been previously well supplied with oils, and emollient poultices; and the vessels emptied by bleeding, and evacuations.

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The common opinion of its being impossible, from the *synovia* hardning, and filling up the socket, is without foundation, as that fluid is found to retain its lubricity, and neither to inspissate, or concrete: the more general cause may perhaps be from a fracture in the head of the bone, forming an anchylosis; from the lacerated parts having grown firmly together; or from the intervention of some muscular substance. After the reduction, the applying bandages about the joint seems unnecessary; as a gentle motion may be proper to restore the parts to their natural situation, and a total inaction be prejudicial: keeping the elbow suspended in a sling close to the side of the body, will be all that is necessary.

Luxations compounded with fractures in general require immediate amputation, before the limb becomes inflamed in consequence of the laceration of the tendons, and membranous parts: there are however cases on record, where the ends of the *Tibia*, and *Fibula* have been sawed off; also the *Radius*, and *Ulna* at the wrist, and other dislocated bones, which could not be kept in their place: these means however should never be attempted, but in young healthy subjects, least the attempt to save a limb, may be at the expence of the patients life; or that after infinite pain, and suffering, it prove not, at last, so useful as one of wood.

In luxations of the patella, the leg must be extended to the utmost, in order to relax the ligaments.

C H A P.



## C H A P. XIV.

*Sprains, and Contusions.*

**I**N all sprains, the tendons, and ligaments connecting the joints, are overstretched, and lose their elastic powers; sometimes their fibres are ruptured, and consequently their functions are so enervated, that they are deprived of their power of action.

The best remedy at first, is to bathe the part well with hot vinegar, or good old verjuice, and sal ammoniac, to apply a thick compress, dipt in the same on the part, secured by a proper rowler: and this application should be renewed as it grows dry, for the first two days.

If the part be much swelled, and so painful, that it cannot bear bandage; after bathing with the above, let it be enveloped in a poultice of oatmeal, oil, and vinegar, which should be renewed twice a day; and, if the patient be of a full habit, blood should be drawn off. The discutient fomentation with vinegar, is of use to abate the pain, and the beer poultice is preferred sometimes to the above.

When the inflammation, and swelling is subsided, the parts may be bathed with spirituous and saponaceous medicines, as camphorated spirit of wine, opodeldoc, or arquebusade; and a rowler should constantly be applied, 'till the strength

strength of the joint, or limb be confirmed: a gentle motion of the part, without supporting any weight, may be given, to prevent the sheaths of the tendons becoming rigid, and stiff, by total inaction.

If the injured parts recover their tone but slowly, they may be plunged daily in cold water, or pumped on, rubbing them afterwards with a flesh brush, or coarse cloth. Strengthening plaisters are of little or no service, it is time, and bandage, that have the principal share in considerable injuries of this sort, particularly well fitted joint pieces, and laced stockings.

Ganglions are often the consequence of strains, or bruises of the tendons; they arise from the juices flowing out of the extremities of the ruptured tendinous fibres, which become inspissated and hard: they are sometimes removed by repeated frictions, and pressure, and the application of mercurial ointments, and emplaisters of the same, or soap: the fluid sometimes is gelatinous, bursts of itself, and is absorbed; frequently it disappears without any application, and often returns again: when very troublesome from their situation, they may sometimes be opened, or removed by incision; but this practice should be used with great caution; as wounds of these parts in bad habits of body, are attended often with very alarming symptoms.

In *contusions*, or bruises, from the violence of the blow, the parts have lost their tone;

or



or the blood vessels being ruptured, the blood is effused in the cellular membrane.

The intention of cure consists in restraining the effusion, dissolving the ecchymosis into lymph, that it may be absorbed, and dispersed through the pores of the skin.

This is effected by bleedings, and cooling purges; by such attenuating medicines as nitrous, neutral, and volatile salts; or both combined, as in mindererus spirit, with plenty of diluting liquors.

The external treatment at first should be thick compresses, wrung frequently out of vinegar, and spirit of wine, with proper bandage, to restrain the effusion. The vinegar, and red wine lees poultice, may also be proper for this purpose; afterwards, discutient fomentations with vinegar, and sal ammoniac, the strong beer poultice, or that N°. xli. may also be made use of.

Spirituous applications are not so proper at first, as they tend rather to coagulate, than resolve the blood; for this reason, a solution of salts in acids is preferred, as mindererus spirit, sal ammoniac and vinegar, to which may sometimes be added a fifth part of camphorated spirits, or arquebusade water: if notwithstanding these means, the blood coagulates, and cannot be dispersed, it must be evacuated by incision on the part.

Contusions of the head often demand the utmost attention, as the effects are not perceived.

ceived sometimes, 'till several days after, when the symptoms of an injured brain, from the shock shall be manifested. To prevent the consequence of violent blows of the head, which the pericranium, and aponeurosis, as well as the internal parts of the skull may suffer from; large, and repeated bleedings, are essentially necessary, with gentle purges, so as to keep the bowels constantly open: fomentations and poultices are proper, especially if the aponeurosis is much bruised; otherwise compresses dipt in brandy, and water, or the above solutions, will be sufficient; or at first, embrocations with oil, and vinegar.

Bruises on the eye must be treated with bleeding, and bathing with mindererus spirit, and if much swelled, the above poultices may be applied, to discuss, and discharge the extravasated blood: after fomenting with the discutient fomentation, and vinegar; the above spirit diluted, may be constantly applied by compresses wetted therein, to which a little camphorated spirits may occasionally be added. If inflammation ensues, treat it as an inflammatory case.



## C H A P X V.

### *Hernias, or Ruptures.*

**A**S it is foreign to the design of this compendium, to enter minutely into the subject of ruptures in general, we shall only lay down

down a few general precepts in regard to their treatment, in particular cases.

The ruptures in children, are most commonly easily reduced, and their return should be prevented, by an *early* application of a proper truss: this will in time effect a radical cure, as the sac, which includes the gut, is now thin, and capable of being united by a proper pressure of a well fitted truss; what the nurses call a wind rupture, is a true rupture of the gut, or a species of hydrocele; which usually submits to restraining fomentations, and poultices, with physic.

Previous to the reduction of ruptures in adults, a large bleeding should be made, and repeated occasionally, in an erect posture, in order to induce fainting; during which the parts are relaxed, and the return of the gut thereby facilitated.

The femicupium, or warm bath, is to be preferred to fomentations, and poultices, which affect only the skin, and integuments; and perhaps do harm, by rarifying the air, in the intestine: the reduction should be attempted, while the patient is in the bath, and immediately after a copious bleeding. As no verbal description can convey an adequate, and perfect idea of reducing ruptures; we shall only observe, that sometimes it is of use to reverse the patient, and make him stand as it were on his head; by which position, the whole packet of small intestines hang by the



strangulated portion, and thereby disengage it. In general, the patient should be laid in a supine posture, with his body lower than his thighs: the thigh on the diseased side should be so elevated, as to contribute as much as possible to the relaxation of the abdominal aperture; and the surgeon, grasping the lower part of the tumour gently with his hand, must endeavour to procure the return, by gentle continued pressure toward that opening. These manœuvres will often succeed, but when the handling becomes painful, and fatiguing to the patient, we should desist for a few hours, and try the effect of other means. When the parts are fairly reduced, they should be kept from falling down again by a bandage, whose pad will make a constant pressure against the opening in the abdominal tendon.

Stimulating purges, which are often given, with a view of opening the stricture on the gut, are frequently found to be pernicious, when they fail to answer that intention; as they aggravate the disorder, by the accumulation of fluids, which they derive on the obstructed part: but the same medicines so unsuccessfully applied by the mouth, may be advantageous, when introduced *per anum*; for by the stimulus they occasion, and by increasing the peristaltic motion of the guts; they may contribute to the withdrawing of the confined bowel: and should they not succeed in this intention, they will return, without increasing

creasing the load on the stricture of the gut. A decoction of the leaves of tobacco, is often preferable to the smoak, so much celebrated by some; as a proper tube to fill the intestines therewith, is seldom to be obtained; these with suppositories of salt, honey, and aloes, are sometimes used with success: but when internal purgatives are thought necessary, two ounces of salts may be dissolved in mint water, or senna infusion, and given by cup fulls, 'till stools are procured.

If these means, after proper trials, fail of success, the operation must be put in practice; but it requires great surgical abilities, to determine the precise time to perform it; which, if delayed too long, renders it ineffectual; as the strangulated gut is often found mortified: in general, the tenseness, and inflammatory disposition of the parts without, proclaim the state of those within, and is a principal circumstance to direct the operation: for more particular directions, consult the treatise on this subject, by that expert operator, and masterly practitioner, Mr. Pott.



C H A P. XVI.

*Hæmorrhoids, or Piles,*

**A**RE a disease arising from an effusion of blood into the cellular membrane surrounding the rectum: when they are of a livid

colour, and very painful, they are called the blind piles; when they break and discharge blood, they are termed the bleeding piles.

If the pain, and inflammation be great, and the person is plethoric, bleeding in the arm is absolutely necessary, and may be repeated occasionally: to ease the pain, emollient fomentations, and vapours should be applied, with poultices of the same: they may be prepared with elder flowers, linseed, poppy heads, and a few chamomile flowers boiled in milk; the pulp of which may be applied as a poultice, with grated bread, or linseed meal, and elder ointment.

Repellent applications are sometimes successfully used at first, as litharge vinegar, mindererus spirit, or two drams of white vitriol, dissolved in four ounces of water: these should constantly be applied by compresses of linnen dipt therein, the body being kept open with gentle cooling phyfic; as lenitive electary, cream, and soluble tartar, manna, magnesia, &c.

When the internal piles are very painful, a little lard, or pomatum melted, may be thrown up with a syringe: a few grains of opium dissolved in oil is proper also for this intention: and when the external piles are in the same state, they may be anointed with the latter, or fomented with lime water, and thebaic tincture.

When



*Abscesses of the Anus and Nates, &c.* 453

When they are very turgid, and will not disperse, leeches may be applied, or they may be punctured with a lancet, setting over warm water, to favour the discharge of blood. When, in the bleeding piles, the hæmorrhage is not profuse, it ought rather to be encouraged than suppressed; but if necessary, it may be restrained by the methods we have already laid down in the Chap. on wounds of the blood vessels.

Sulphur medicines are often recommended on these occasions, as a kind of specific; but they are possessed of no such powers, and act only as gentle openers of the body: the lac, and flos sulph, or æthiops mineral may however be joined with cassia, or lenitive electary.

When piles do not disperse, they frequently terminate in abscesses, forming sinusses about the rectum; the method of treating which is laid down in the next Chapter.



C H A P. XVII.

*Abscesses of the Anus and Nates, &c.*

**A**Bscesses forming in the neighbourhood of the rectum and bladder, are often attended with strangury, dysury, and even total retention of urine, from the inflammation of the parts extending to the neck of the bladder;

#### 454 *Abscesses of the Anus and Nates, &c.*

and these symptoms sometimes continue 'till the matter is formed and discharged.

The two former are most commonly relieved by the loss of blood, and the use of emulsions with nitre and gum arabic: but the last, though, while it continues, it is both fatiguing and alarming, should be treated only by gentle methods, as bleeding according to the patient strength, emptying the bowels by mild purges, and glysters; putting the patient into a warm bath, and applying bladders with hot water to the pubes and perinæum; but above all other remedies, the injection of glysters of warm water, oil, and opium: and when a painful tenesmus attends, the above glyster may be thrown up, with starch dissolved in the water.

The indiscreet use of the catheter, has often been found to produce bad symptoms, by the irritation it occasions on the inflamed parts; and for many other reasons laid down by the judicious Mr. *Pott* on his remarks on this subject: to which we refer the reader, for a thorough knowledge of these disorders.

The adjacent parts are differently affected according to the extent of the inflammation, and depth of the abscess; which sometimes pervades the rectum, perinæum, and bladder. When the disorder is of the phlegmonoid kind, the maturation should be assisted by soft poultices, and the thinner the skin is suffered to be

be come, before the abscess is opened, the better; as the induration of the parts about, will thereby be the more dissolved.

In making the opening let all the skin covering the matter be freely divided, that the contents be discharged at once; future lodgment of matter be prevented; and convenient room be made for the application of proper dressings.

The cavity of the abscess is then to be regarded as the effect only of the gradual distraction, and separations of its sides, with very little loss of substance, compared with the size of the cavity; and the induration round about, as nothing more than a circumstance, which necessarily accompanies every inflammation in membranous parts. The dressing should be light, soft, and easy; the cavity not stuffed, or crammed, to prevent the coalition of the sides; or should irritating dressings be applied, under the pretence of dissolving the hardness, which will naturally subside by digestion, and the assistance of emollient poultices.

If in the course of dressing, it should be discovered that the gut is denuded, pierced, or eroded by matter, it should be divided, by laying the two cavities in one, and be dressed according to the method laid down in the ingenious treatise above recommended. In the opening of large abscesses, the finger introduced into the cavity, will be found the best director, as the bridles which should be divided, will



be best distinguished thereby, and the arteries avoided.

In abscesses of the breast, the suppuration should be compleat, so as to be ready to burst, before they are opened: by this delay, the inflamed glands are melted down, and the induration is dissolved; so that by the help of emollient cataplasms, and a proper discharge, the vessels are unloaded, the swelling gradually subsides, and the cavity fills up. If the abscess is seated in the centre of the breast, and the matter flows not through a depending orifice; a counter opening must be made for that purpose, and kept open by a seton drawn through it; but a free opening at first, generally prevents this inconvenience: in all sinus's that communicate with abscesses, we should first endeavour to close them, by the application of proper compression, and bandage, if the part will admit of it; if this succeeds not, and matter lodges therein, the sinus should be laid open, where it can be done with safety.

The yellow basilicon alone, or melted down with a fifth part of the oil, or balsam of turpentine, is perhaps equal to most other digestives; or to this ointment, in some particular constitutions, where warmth, and stimulus are required, may be added the natural balsams, as styrax, balsamum traumaticum, copivi, peru, &c. till digestion is established; and when tendinous, and ligamentous parts,  
are

are laid bare, no greasy applications should be applied to them; but pledgits pressed out of ol. tereb, taking care to expose them as little as possible to the air, at the time of dressing, to prevent their sloughing.

In the application of dressings to the inside of all abscesses, and other cavities, and in all cases where suppuration is necessary, they cannot be too light, soft, and easy; and in themselves, they should be lenient, and relaxing, and applied in such a manner as to be no burthen, nor resist those efforts which nature always makes towards restoring dilated parts to their natural state, and size. When a contrary method is pursued by irritating, and painful applications, and these too, by being stuffed into the part, they occasion an uneasy distension; the operations of nature are impeded thereby; and by retarding suppuration, and preventing the restoration of the distended parts to their natural capacities, every rational intention is defeated.

In cold, languid constitutions; in old people; and in inclement seasons; flannels wrung out of a decoction of the warm herbs, at the time of dressing, are sometimes essentially necessary, to promote a free circulation, and establish a good digestion; to which may sometimes be applied with good success, an emollient, or the strong beer poultice, over the dressings; to animate which more, the species e cymino may occasionally be added, when a mortification threatens.

## 458 *Obstructions in the Æsophagus*

As in the Chapter on dropsy, we did not particular mention the anasarcaous tumour of the scrotum, or the preference of punctures to scarification; we shall in this place observe to the young practitioner, that the former is always to be preferred to the latter; as wounds of membranous parts in anasarcaous, or dropical habits, are both painful and hazardous; are apt to inflame; are with difficulty brought to suppuration; and will often prove gangrenous, in spite of all endeavours to the contrary.

But simple punctures with the point of a lancet, are much less liable to the above symptoms; they generally leave the skin soft, cool, uninflamed, and in a state to admit a repetition of the same operation, if necessary: and as the communication of the cells of the dartos and membrane cellulosa with each other, is so free through every part of them, the punctures thus made, will as certainly and as freely, drain off all the water, as a large incision, without any of its inconveniencies, or its hazard.



## C H A P. XVIII.

### *Obstructions in the Æsophagus and Windpipe.*

**W**HEN bodies are stopt in the gullet, without being able either to descend, or to return up again, very dangerous symptoms



toms arise ; which are frequently attended with acute pain ; and if the windpipe is compressed thereby, a dreadful suffocation is the consequence.

Whenever any substance is thus detained in the gullet, it must either be extracted, or pushed down into the stomach. The safest, and most certain way undoubtedly, when practicable, is to extract it with the fingers, or forceps, especially if they are indigestible bodies, as corks, linnen rags, large fruit stones, bones, wood, glass, metals ; and the more so, if their shape be rough, sharp pointed, or angular, which add to their danger.

If the substance is descended so low into the gullet, that the fingers and forceps cannot be duly applied, a crotchet or kind of hook must be employed. These may be made at once with a pretty strong iron wire, crooked at the end, which is to be passed below the substance, and when it has hooked the body, is to be drawn up with it.

A long flexible steel probe, terminating by a little round button, is very useful to extract bodies lodged low in the gullet, and to prevent the danger of one pointed, which might fix in the œsophagus : this blunt hook may be of use, when pins are lodged across the gullet.

When the obstructing bodies are small, and elude the above crotchet or hook, a kind of rings may be used, and made either solid or flexible.

460 *Obstructions in the Œsophagus*

flexible. The solid ones are made of iron wire, or of a string of very fine brass wire, silver, or whale bone; to the extremities of which, several small rings are attached, so that they may present themselves on all sides to the surface of the gullet: these rings may be formed also of twisted thread waxed, and are intended to entangle pins, or other small bodies, by turning them about from right to left, before extraction. A loop made on the chord at the end of a whip, and dipped in oil, has been successfully employed in extracting a large fish bone, on a particular emergency.

When these methods prove ineffectual, the patient should be made to vomit, if he can swallow: ipecacuana, tartar emetic, or oxymel squills, should be given for that purpose; if he cannot, the throat should be irritated by a feather, or the finger: these failing, half an ounce of tobacco may be boiled in a pint of water, and thrown up as a glyster, this will produce a violent vomiting, and sometimes succeeds in throwing up the extraneous body, by that action,

When it is more easy, and *convenient*, to push the obstructing body downward, leeks dipped in oil, have been used for that purpose; or a wax candle heated so, as to become flexible; a piece of whale bone also with sponge; or an iron wire, one extremity of which may be thickened, and blunted with a little melted lead: small sticks of flexible wood, may  
be

be fashioned smooth for this use, such as the birch tree, hazel, ash, willow, a flexible plummet, or a leaden ring; which may be covered over also with a thin bit of sheeps, or chickens gut: these should be pushed against the obstructing body, 'till it is forced into the stomach; and sometimes it requires a considerable force to effect.

It is often useful, and even *necessary* to take away a considerable quantity of blood, to prevent the inflammation, which frequently ensues: the patient, if possible, should frequently swallow oil, and any emollient liquor, as milk and water, a decoction of barley, mallows, linseed, or bran: if he cannot swallow, they should be injected by means of a crooked tube passed below the windpipe, or glottis.

When we cannot remove the obstructing substance, the patient must be treated, as if he had an inflammatory disease: besides bleeding, the whole neck may be fomented, oiled, and surrounded with emollient poultices, of bread and milk, mallows, linseed, &c.

When extraneous bodies are once arrived in the stomach, such as pins, fish bones, glass, &c. Oily medicines should be freely given, with fat broths, barley soops, panadas, gellies, and other soft spoon meats; with gentle purges at proper intervals, to assist in the safe conveyance of them through the meanders of the intestines, where they are frequently retarded,  
and



462 *Obstructions in the Œsophagus, &c.*

and occasion sometimes, no small degree of pain, and danger.

The probang, or sponge strung on whalebone at each end, and secured with threads to prevent its escape, may be used with great advantage on these occasions, as the obstructing body may be entangled thereby, and drawn up: in this manner the quill, and feather of a goose quill was extracted, that was lodged in the gullet: more strings added might facilitate this entanglement.

Pins swallowed, often pass the bowels with impunity, if they stick not in the gullet; for the head being heavier than the point, passes forward: but needles swallowed, have not this advantage, and often therefore force their way through different parts.

In passing the probang, or any other instrument into the æsophagus, it should be pushed slowly along the roof of the tongue, above the epiglottis, carrying it towards the posterior parts of the pharynx, leaning gently on the side of the vertebræ.

When bodies slip into the windpipe, and are engaged there, if they cannot be expelled by sneezing, coughing, blows on the back, &c. an opening must be made into it, by a longitudinal incision of the rings of the trachea, if the part where it is lodged, can be fixed on; and which is generally pointed out by the patient: this operation may be safely performed,

*Stiff joints, and contracted Tendons. 463*

performed, and for want of it, history informs us, that many lives have been lost.

We shall conclude with observing that a proper degree of agitation has sometimes loosened the inhering body, more effectually than instruments; and it has been experienced that a smart blow with the fist, on the middle of the back, has often disengaged such obstructed bodies. Very good effects have also ensued from riding on horse back, by the succussions, and shaking of that exercise.

For the treatment of obstructions in the œsophagus from internal causes. *Vid. p. 245.*



C H A P. XIX.

*Stiff joints, and contracted Tendons.*

**W**HEN a stiff joint proceeds from two injured bones uniting together, it is absolutely incurable: but if difficulty of motion proceeds from long rest, and confinement in a particular posture, the joint and tendons should be well bathed, both night and morning, with neats foot oil; at the same time, using gentle flexure, and bandage, with proper splints: if this method succeeds not, warm, emollient, and medicated baths must be used; or the steam of the same should be conveyed to the limb, for an hour, or more, before the application of the oil: this method assiduously

#### 464 *Stiff joints, and contracted Tendons,*

duously pursued for a month, or six weeks; will dissolve the inspissated juices, relax the tendons, and the sheaths they run in; so that the most obstinate contractions will yield thereto, after due perseverance.

The following remedy being strongly recommended, for relieving contractions of the tendons, and nerves, occasioned by large wounds; we shall here insert from M. *Morand's* authority. This is nothing more than an artificial mud, made with powder of coal, and water, and applied daily in the form of a poultice: the good effects attributed to it, are supposed to be owing to the quantity of sulphureous particles, with which it abounds: the cures from this remedy, are many, and well attested by surgeons of eminence.

Pumping at *Bath*, or the fall of warm water alone, or impregnated with sulphur, and aromatics, from a higher situation, on the part affected, has often done wonders in some topical diseases. Obstinate disorders of the joints, and knees, have often been cured thereby.

Frictions, with woolen cloths, are of great use in resolving obstructed glands, especially if used for an hour together, after having been exposed to the vapour of warm water and vinegar.

We shall conclude with observing that there are frequently discharges from the *sacculi mucosi*,



*Stiff joints, and contracted Tendons. 465*

cosi, or bursæ mucosæ, of a similar kind, to the sinovia of the joints, which may deceive our judgment without due attention: these sacculi lie under the tendons of some long muscles, that play upon bones near, or over joints, furnishing them with such a lubricating fluid, to prevent the ill effects of friction: the principal are situated under the deltoide, upon the acromion scapulæ; a small one under the biceps brachii; a large thin one beneath the tendons of the iliacus internus, and psoas muscles; a large one under the gluteus maximus; a small one between the gluteus medius, and pyriformis; one is situated between the termination of the biceps cruris externally, and the capsular ligament of the knee; another lies between the tendon of the semimembranosus, and inner condyle of the tibia, and the capsular ligament of the joint. Behind the tendons of the cruralis and vasti, there is a thin, but large one, connected to those tendons before they join; and after their junction, it is fixed to the patella. Under the extremities of the tendons of the gracilis, sartorius, and semitendinosus is a large one; another large one lies under the inner head of the gemellus; and between the soleus, and upper part of the os calcis, lies also a large sacculus; there are a few small ones which we have omitted.

We thought proper to mention these sacs, that the young practitioner may not be alarmed from the discharge, when they are wounded;

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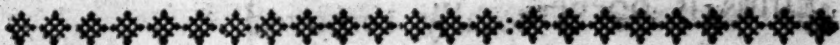
#### 466 *Stiff joints, and contracted Tendons.*

and imagine that it comes from the bursal ligaments of the joints; which may be discovered by the probe, and the larger sinovial discharge which they afford. Wounds of the latter, are undoubtedly much more dangerous; and therefore it is of consequence to distinguish whether they penetrate the joint, or only a facculus is opened.

In some swellings of the knee, and other joints, a lymphatic fluid is sometimes collected between the muscles, and in the sac. mucos, without side the *bursal* ligament: this swelling is attended with a dull sensation, and no discolouration of the skin: it is sometimes dispersed, and the extravasated fluid is absorbed, by means of discutient fomentations, or embrocations with sal ammoniac, and vinegar, and the volatile liniment; or a constant application of mindererus spirit, with drastic mercurial purges, antimonial vomits, and a strong decoction of the woods, and nitre, or the diuretic salt.

When the fluid is too thick to admit of absorption, and it is lodged without side the bursal ligament of the joint; the above method failing, the tumour may be opened, and kept so 'till the cavity contracts: and in order to recover the tone of the parts, the cold bath, pumping, and a lace knee piece are essentially necessary: but when the fluid is within side, and is called a dropsy of the joint, no opening must be made, the access of the air ofte changin

changing the soft, into an acrimonious fluid, productive of dreadful consequences: the criterions by which we may distinguish one from the other, are the manifest fluctuation of the fluid, and its residence higher up in the thigh, when without side the bursal ligament.



C H A P. XX.

*The Mumps*

**I**S a tumour of the face and throat, which sometimes increases to such a prodigious size, as to obliterate the features. It begins with a slight fever, is sometimes of the colour of a damask rose, chiefly in the cellular membrane; and though the distention of the parts is quick, and extraordinary, yet it is attended with little pain, the swelling subsiding in five, or six days, leaving generally a thickness, and hardness on the *parotid*, and maxillary glands.

The method of treating it should be simple, and on the *antiphlogistic* plan; giving small white wine whey on going to bed, and covering the parts up warm, with soft flannel, or sheeps wool. If they should be attended with pain, foment with warm milk, and if the swelling be tense, anoint with oil of roses.

This disorder chiefly affects young persons, though adults are not exempt from it.



## 468 *Gonorrhœa, and Venereal Disease.*

When the swelling begins to subside, a few doses of purging physic, are necessary to carry off the remains of the peccant humour: and, if the above mentioned glands continue hard, small doses of calomel should be joined to the physic; or they may be rubbed with a mild mercurial ointment; keeping them warm, till the hardness is totally removed.

If the swelling terminates in an abscess, it should be opened, and treated in the common way, and it generally heals up kindly. If it be repelled by cold, or improper treatment, the humour is often translated to other glandular parts; but, this circumstance, requires no alteration in the general method of cure.

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### C H A P. XXI.

#### *Gonorrhœa, and Venereal Disease.*

**I**T appears from the writers on this distemper, that it was more than half a century, before any mention was made of the *Gonorrhœa*; now usually the first, and most frequent symptom attending infection: so that it may be considered now as local, or universal.

The species generally called a *clap*, which is local, should be treated at first as an inflammatory disease, by bleedings, laxative purges, as manna, and salts, &c. soft cooling, and

*Gonorrhœa, and Venereal Disease.* 469

and emollient ptisans, and emulsions with nitre, and gum arabic : these should be drank of liberally, in order to soften, and dilute the salts of the urine, that they may not irritate the inflamed parts, as they glide over them.

Fomenting, and frequently washing the parts with bran and water, to which a little vinegar may be added, is necessary both for cleanliness, and utility ; and to lubricate, and relax the inflamed parts, and consequently to allay the heat and inflammation, a spoonful of any bland, soft oil, should be thrown up the urethra three, or four times a day.

As soon as the inflammation, and pain, are abated, by thus blunting, and sheathing the acrimonious particles ; which, if the patient lives abstemiously, they generally effect in eight, or ten days ; and when the matter discharged, assumes a milder, and less irritating quality ; gentle astringent injections may be used, to brace up the relaxed vessels, and moderate, or check the discharge.

Various are the forms for this intention, perhaps a simple solution of white vitriol in fair water, is equal to most ; the proportion may be ten grains to two ounces ; but this must be regulated by the sensations, and effects. Some prepare their injections of mercury, as a dram of calomel, rubbed down with double the quantity of gum arabic, and dissolved in about half a pint of water, to which they add

#### 470 *Gonorrhœa, and Venereal Disease.*

occasionally, ten, or fifteen grains of white vitriol, while some mix the vitriol, or a small quantity of verdigrease with the oil.

To every six ounces of water, others add twenty, or thirty drops of *Van Swieten's* sublimated solution, or a dram, or two of *Ward's* white drops, or of the solution in the *Pharmacopœia*; but the quantity must be regulated, by the effects and irritations produced; these restraining, and oily injections, are by some, thrown up alternately: it may be necessary however to observe, that whenever the symptoms and pain grow worse, in consequence of the restraining injections, they must be discontinued; and the cooling plan must be again pursued, with oil, 'till these new complaints are removed, or carried off.

By this method, simple *claps* may readily be removed without giving a grain of mercury internally; and, if the symptoms should be troublesome, they may easily be palliated: The *Phymosis*, and *Paraphymosis*, may in general be relieved by emollient fomentations, and cataplasms, and throwing up oil between the glands, and prepuce; but, if there should be concealed chancres, the prepuce must be divided; and if the stricture be great in the *Paraphymosis*, the folds must be divided by the knife, to prevent mortification.

*Buboes* that are hard, and not yet inflamed, and in a state of suppuration, may be dispersed  
by



*Gonorrhœa, and Venereal Disease.* 471

by rubbing in daily the mercurial ointment, with gentle physic intermediately: but, when matter is absolutely forming, the best way is to promote the suppuration by warm plaisters, and when it is formed, to evacuate it by caustic.

*Priapisms*, and *Chordee* are to be relieved by bleedings, opiates, and mercurial frictions, with cooling regimen.

The *Hernia Humeralis*, or swelled testicle, should be treated as inflammatory, by bleedings, lenient purges, with emollient fomentations, and poultices; and the remaining hardness, may be dissolved by rubbing it with the mercurial ointment.

*Chancres* should be fumigated with cinabar, and dressed with precipitate mixed up with soft cerate: mercurial pills should be taken every night, prepared with five grains of argentum vivum; or half a dram of mercurial ointment should be rubbed daily into the groins, and thighs; but so as to avoid salivation, by interposing, now and then, a gentle purge.

*Venereal warts, and excrescences*, are to be removed by rubbing with a bit of caustic, or washing them with a solution of lapis infernalis, viz. a dram, or two, in a pint of lime water: when they are pendulous, the shortest way is to snip them off, and rub them with the lunar caustic, or to fumigate them with cinnabar.

In the second infection, or when the blood is tainted with the venereal poison; mercury,

## 472 *Gonorrhœa, and Venereal Disease.*

and its preparations, are the antidote, and are principally to be depended on; and, in general may be so directed, as to answer the end without salivation, by a discreet use of the sublimate solution; the pil. cæruleæ; mercur. calcin; mercurial frictions; and decoctions of sarsaparilla.

But as no one preparation of mercury, will, in all cases, and constitutions, be equally effectual; it must be left to the prudence of the surgeon, to direct accordingly; taking care that the blood be saturated with the mercury, in proportion to the degree of infection, and the inveterateness of symptoms.

It may be necessary to observe, that when a *chancre* appears, though no bigger than a pins head, a mercurial course should be directed; as we may conclude the venereal virus has been taken into the habit, and may hereafter be productive of a pox, if the seeds are not now eradicated: for the removal of gleet, the vitriolic injections, will be greatly assisted by passing up bougies, in order to press down the fungosities in the urethra, 'till the relaxed parts recover their tone and elasticity.

We shall conclude, with another remark, in regard to the removal of the *ardor urinæ*, in claps, by giving freely of nitre; which is best effected by such soft mucilaginous bodies, as gum arabic, linseed infusion, marshmallow decoctions, and barley water; and indeed with plenty of any other aqueous vehicles, which  
will

will dilute the salts in the urine, and render them insipid. Now as nitre adds to these salts, and a solution of it applied to any excoriated part, gives considerable pain, which simple water does not, we may reasonably conclude, that this salt will rather augment than diminish the pain in evacuating it. And, indeed, this has been confirmed in practice, by its increasing the natural stimulus of the urine in claps.

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C H A P. XXII.

*Embalming dead Bodies.*

**A**FTER evisceration, all the cavities are to be well cleansed, and the humidity sucked up with sponges; then washed with tinct. Myrrhæ, and filled with a species, compounded of fragrant aromatic drugs, and gums reduced to powder, not very fine; first, restoring the heart to its proper residence; after having opened its ventricles, cleansed and washed them with the tincture, stuffed them with the species, and sewed them up; and then the cavities are to be stitched very close, with the glovers, or spiral suture.—Large and deep incisions are also to be made in all the most fleshy parts, cleaning and washing them with the tincture, in the same manner, filling them with the antiseptic species, and stitching them up.—Then the head, trunk, and limbs are to be perfectly well covered with cere-cloth; putting a piece under



under the chin, to be secured by sewing on the top of the head ; after having well adjusted the cap of the skull, sewed the scalp together, and cleared the mouth, as has been directed for the other parts, and putting in some of the species.—The cere-cloth is to be prepared with a composition made of wax, rosin, storax, and painters drying oil, S. A.—After the application of the cere-cloth, with great care and exactness, cut in suitable pieces, according to the respective parts, and closing them well every where ; the face being close shaved, is to be covered with some of the above composition melted, and laid on with a brush of a proper degree of heat, and of a moderate thickness ; which may have a faint flesh colour given it with vermillion, and when it is grown cold and stiff upon this part, it may be lightly struck over with hard varnish ; or this varnish, applied thick, may here serve the purpose alone.—A cap is to be well adapted to the head, falling down upon the neck, and to be sewed under the chin, making a few circular turns about the neck, with a roller of a fit breadth.—All the rest of the corpse is to be inclosed in a sheet, to be artfully cut, and sewed on very close and smooth, with the finest tape, and herring bone seam ; over which an appropriate dress is to be put, as the relations, or friends think fit to direct, or appoint, and then laid into the coffin, which should be in readiness : but when it is some  
great

great personage, who is to lie in state for public view, before the funeral rites are solemnized, the dress must be appropriated to his dignity, and character.—The brain, and other viscera are to be put, with some of the species into a leaden box.—Sometimes the heart, prepared, as has been directed, to preserve it from putrefaction, is deposited in an urn by itself.





# PHARMACOPOEIA, MEDICO CHIRURGICA.

## Nº. 1. *General Diluting Drinks.*

**M**AY be prepared with infusions of baum, sage, lime, and elder flowers; to which may be added, the juices of lemons, oranges, or citrons, sweetened with honey, or sugar: or the jams of currants, raspberries, elder, &c. diluted with water.

## 2. *Barley Water, with Nitre, &c.*

Should be prepared according to the College Dispensatory, adding a dram and a half, or two drams of nitre to every quart, with a proper quantity of sugar.

## 3. *Imperial Water.*

Pour on two drams of cream of tartar, and the peel of a lemon finely pared, two quarts of boiling water; let them stand close covered twelve hours, then decant the liquor, and sweeten it with fine sugar: to a quart of the barley water, may occasionally be added, an ounce of Tamarinds, or two drams of cream of tartar.

## 4. *Almond Emulsion, and Pectoral Drink.*

Prepared according to the College Dispensatory: to render them opening, add to a quart, two ounces of manna, and six drams of soluble tartar.

## 5. *Decoction*



5. *Decoction of Tamarinds with Senna, or Rhubarb.*

Take of tamarinds, six drams; cream of tartar, two drams; senna, or rhubarb, from one dram to two, or three; manna, half an ounce; water, half a pint; boil the water with the tamarinds in an earthen vessel to half the quantity; then pour it on the senna, or rhubarb; which strain off when cold, and dissolve the manna therein.

6. *A general cooling Purge.*

Take half an ounce of manna, with the same quantity of Glauber, Rochelle, or Epsom Salts; dissolve them in two, or three ounces of infusion of senna, to which may be added, half an ounce of the tincture of the same: or six drams of manna, and the above salts may be dissolved in water, with half an ounce of tincture of senna.

7. *Emollient Glysters,*

May be prepared with ten, or twelve ounces of a decoction of oatmeal, bran, mallows, or chamomile flowers; to which may be added, four spoonfuls of oil, and one of honey, or coarse sugar; when they are intended to be opening, add half an ounce, or more of lenitive electary, or the same quantity of purging, or common salt.

8. *Topical Emollient Applications,*

May be made of decoctions of marshmallows, mallows, elder, chamomile flowers, dried poppy, barley water, or milk and water, with hard soap, by way of fomenting a pained part: bags of the above herbs may be applied hot, and their heat retained by the application of hot tiles over them; bladders, half filled with the above decoctions; or hot water and bran, may be used for the same purpose: Poultices of bread and milk, barley, or ricethoroughly boiled, with oat, or linseed meal, may be used to abate pain, or local spasms.—The volatile liniment, or camphorated oils, may also be rubbed into the part for this end.

9. *The*

Nº. 9. *The Fever, or Saline mixture.*

Take two drams of salt of wormwood, or tartar; three ounces of lemon juice, and ten of spring water; brandy, or nutmeg water, two, or three spoonfuls, and half an ounce of sugar, to which two or three grains of emetic tartar may be added.

10. *Another Saline mixture.*

Take of the above salts, or pure Russia pot Ashes, half an ounce, distilled, or white wine vinegar half a pint; pure water, one pint; pepper mint water, four ounces; sugar, a sufficient quantity; where lemon juice cannot be afforded, the vinegar may supply its place, or when the salt is dissolved in the water, a sufficient quantity of spirit of vitriol may be dropt in 'till it ceases to ferment.

11. *A Fever Powder.*

Prepared with ten, or fifteen grains of unwashed calx of antimony, and the contrayerva powder of the London Dispensatory; to which may occasionally be added, the same quantity of nitre.

12. *The Antimonial Fever Powder.*

Take of calx of antimony, or powder of crabs claws, ten drams, tartar emetic one dram; mix together, and keep it close stoppt; the dose from three grains, to ten, every four, or six hours: or from half a grain, to a grain, and a half of tartar emetic, with ten of the antimony may be given for a dose, where puking is intended.

13. *The Antimonial Solution.*

Dissolve three, or four grains of tartar emetic, in twelve ounces of boiling water, to which add three ounces of distilled vinegar, or twenty drops of spirit of vitriol, with a proper quantity of sugar; the dose four, or six spoonfuls, every three, four, or six hours, according to the effects, or operation.

14. *The*

14. *The Antimonial mixture.*

Take an ounce and a half of lenitive electary, and half an ounce of manna; boil them in twenty ounces of water to sixteen, and dissolve ten grains of tartar emetic; the dose from one ounce, to four, every second, third, or fourth hour, 'till the body is thoroughly open'd.

15. *The Snakeroot Decoction.*

Boil half an ounce of snakeroot bruised, in a pint of water to twelve ounces; to which add four ounces of distilled vinegar, or mindererus spirit; to this may occasionally be added mithridate, or the cardiac confection.

16. *The Bark Decoction.*

Boil an ounce of Peruvian bark powdered, in three pints of water to one, and when settled, decant off; to this may be added, according to the case, a proportionate quantity of the above decoction; nitre, or the diuretic salt, &c.

17. *The Camphor Solution.*

Dissolve a dram of camphor, by rubbing in a mortar, with twenty, or thirty drops of rectified spirit of wine, and two ounces of loaf sugar, to which pour on warm by degrees, ten ounces of distilled vinegar, or that of good French white wine.

18. *An Electary against obstinate intermittent Fevers.*

Take an ounce of Peruvian bark, two drams of crude sal ammoniac, and one of myrrh, or long pepper, with two scruples of alum, and a proper quantity of syrup, to be taken between the fits, and repeated once, or twice.

19. *Other Remedies against the same.*

Take chamomile flowers powdered, half a dram, salt of worm wood, alum and myrrh, of each ten grains; to be taken every three hours, when the fever is off.—A decoction of two ounces of chamomile flowers, made by boiling in three pints of water to a quart, to which two,  
or



480 *Pharmacopæia, Medico Chirurgica.*

or three drams of salt of wormwood are added ; may be given to the quantity of four ounces every three hours as above ; to which may be joined, fifteen grains of nutmeg, alum, and extract of bark.

20. *A bitter Infusion, and Tincture.*

*Vide* that of the College Dispensatory, to a pint of which, add steel wine three ounces ; or steep an ounce of orange peel, half an ounce of Winters bark, and two drams of cardamom seeds in a quart of wine or brandy ; the dose one, or two spoonfuls in a glass of water.

21. *A Diuretic Ale, and Infusion.*

Take of mustard seed whole, and juniper berries, of each half a pound, wild carrot seed, eight ounces ; common wormwood four ounces, broom ashes half a pound ; infuse in two gallons of new small ale ; or, Take two ounces of scraped horse radish root ; one ounce of juniper berries ; and two drams of Winters bark, infuse in two quarts of boiling water, and add to it, four ounces of brandy, or Holland gin.

22. *Decoctions against Diarrhæas.*

Boil two ounces of log-wood, or oak bark, with a dram, or two of cinnamon, in three pints of water to a quart ; to which may be added cinnamon water, or japan tincture.—Decoctions may be prepared with semiruba, cascarilla, and rad columb ; by boiling two, or three drams in a pint and a half of water, to a pint : four spoonfuls for a dose thrice a day ; or fifteen grains, or a scruple of the powder.

23. *Antiscorbutic Decoctions,*

Are prepared by boiling three ounces of Burdock root, elm bark ; or sarsaparilla, in three pints, or more of water, to a quart ; to which, half an ounce of liquorice root may be added ; the dose, half a pint thrice a day.

24. *Emmena-*

24. *Emmenagogic Electary.*

Take of black hellebore root, extract of savin, simple, or compound powder of myrrh, each half an ounce; candied ginger, or conserve of orange peel, one ounce; dose, the quantity of a large nutmeg twice a day, with the bitter infusion.

25. *Electary against Bloody Flux.*

Take of red rose leaves powdered, and of newly boiled mutton suet, each four ounces, Lucatellus balsam one ounce; dose, a tea spoonful thrice a day.

26. *An opening Electary.*

Take lenitive electary an ounce and a half, cream of tartar, three drams; jalap powdered, and nitre, of each, one dram; to which may be added, half an ounce of candied ginger, or half a dram of the powder, the dose, a tea spoonful, more or less.

27. *A purging Powder.*

Take of powdered jalap from a scruple, to half a dram, cream of tartar, ten grains, or five of ginger.

28. *Deobstruent Pills.*

Take of gum ammoniac, two drams; squills powdered, and the aromatic species, of each half a dram, or more; castile soap, three drams.

29. *The Solvent, or Chitticks, Drops.*

Take eight ounces of pottash, and four ounces of salt of tartar fresh calcined; mix, and put them into a glazed earthen vessel; then pour upon them, a quart of boiling, soft, spring water; let the infusion remain twenty-four hours, stirring it now and then, and afterwards filter it for use; the dose from thirty. to sixty drops, taken in half a pint of veal broth, milk and water, or linseed tea, twice a day fasting, and abstaining from all acids; in stone, gravel, or bilious obstructions.

30. *Plummer's Alterative Pill, or Powder.*

Take calomel, and golden sulphur of antimony, of each, equal parts, rub together in a mortar; the dose from two grains, to ten, or twenty.

31. *Repellent, and Discutient Gargles.*

Take of the infusion, or tincture of rose leaves, one pint; honey, and white wine vinegar, of each, two ounces; to which may be added, a dram of nitre, or sal ammoniac for a gargle, or vapour.

32. *The Sublimate Drops.*

Dissolve twelve grains of sublimate in a pint of fresh brandy, and filter it for use; the dose, a large spoonful night and morning, or dissolve half a dram in six ounces of water, with two scruples of sal ammoniac; the dose, from three drops, to ten, in a draught of milk and water.

33. *Boerhaave's mixture against Gripes in Children.*

Take of Venice soap two scruples, the yolk of a fresh egg, half an ounce; break them well together, and add three drams of crabs eyes powdered, a scruple of rhubarb, four ounces of water, and an ounce and a half of syrup of roses; the dose, a spoonful every hour, till the gripes cease.

34. *Sudorific, or Dover's Powder.*

Take of opium, and Indian root powdered, of each two grains, tartar of vitriol and nitre, of each, eight grains for a dose.

35. *Ward's Essence.*

Take rectified spirit of wine, a quart; roch alum powdered, two ounces; camphor, four ounces; essence of lemons, half an ounce; volatile spirit of sal ammoniac, four ounces; digest together, to be applied to the pained part, with the palm of the hand, wetted therewith.

36. *The*



36. *The Antimonial Wine, or Essence.*

Take of glass of antimony levigated half an ounce; mountain wine one quart, infuse them together for two, or three days, shaking them now and then, pour off the clear and filtre; dose, from twenty, to sixty drops.

37. *The Rye Poultrice.*

Take a pound of rye flower, four ounces of yeast, and two ounces of salt, dissolved in as much warm water, as will form the whole into a soft paste, or poultrice.

38. *A Resolvent Poultrice.*

Take red wine lees, and the best vinegar, of each, half a pint, in which dissolve half an ounce of sal ammoniac, to which add a proper quantity of linseed, or oatmeal.

39. *An Emollient Poultrice.*

Take of milk, six ounces; grated bread, a sufficient quantity, add the bread to the milk, when of a boiling heat, then beat up well with them, two spoonfuls of oil: or pour a sufficient quantity of boiling water on linseed meal, to which add a little oil. It may be prepared also with a mucilage of the same, thickened with a sufficient quantity of the linseed meal, this last is a good application to pained eyes.

40. *A Discutient Poultrice.*

Take six ounces of barley meal, two ounces of fresh hemlock bruised, or of the powder; boil together, with the barley in a sufficient quantity of vinegar, in which half an ounce of crude sal ammoniac is dissolved; or the hemlock may be boiled in water to a pulp, and thickened with linseed meal.

41. *The Soap Poultrice.*

Take of soap lees, one ounce; oil of olives, three ounces; boiling water, three quarts, linseed meal, a sufficient quantity to make a poultrice;—or to the milk, or linseed poultrice, may be added, a fifth part of soft soap.

434. *Pharmacopæia, Medico Chirurgica.*

42. *An Anodine Poultice.*

Take of mallows, and marshmallows, of each, eight handfuls; chamomile, melilot, and elder flowers, of each, four handfuls; linseed, and fenugrec, of each, one pound, mix together.

Take linseed, one ounce; boil in a quart of water to a pint, strain off, and dissolve in it two drams of opium, and mix it with twelve ounces of the above powder.

43. *An Anodine Discutient Fomentation.*

Take of elder, and marshmallow flowers, each a handful; chamomile flowers, half a handful; poppy heads, two, or three ounces; linseed, half an ounce; boil in three pints of water, to a pint and a half; to which add four ounces of vinegar.

44. *The Discutient Fomentation.*

Take of wormwood, bay leaves, and rosemary, each a handful, boil in a sufficient quantity of water to a quart; to which add half a pint of vinegar, and half an ounce of sal ammoniac.

45. *The Discutient Embrocation.*

Dissolve half an ounce of crude sal ammoniac, in a pint of French, or distilled vinegar.

46. *A Discutient Liniment.*

Take of neats feet oil, half a pint, camphorated spirit of wine, and spirit of sal ammoniac, each two ounces.

47. *An Anodine Embrocation.*

Take of camphorated spirit of wine, six ounces; of spirit of sal ammoniac, and Thebaic tincture, each, one ounce; —for this intention Bate's anodine balsam is proper.

48. *A Resolvent Liniment.*

Take of oil of roses, two ounces; camphor, a scruple; spirit of sal ammoniac, two drams; —or to an ounce of mercurial ointment, add half a dram of camphor, dissolved in a little oil.

49. *A Wash for the Itch.*

Dissolve half a dram of corrosive sublimate, and three drams of white vitriol in a pint of water.

50. *A Lead Ointment.*

Take two drams of calomel levigated, and half a pint of lime water, let them stand for two days, decant the liquor, and reserve the powder.—To two scruples of this powder levigated, add an ounce of elder ointment; for *noli me tangere*, &c.

51. *A neat Elder Flower Ointment.*

Take a sufficient quantity of fresh elder flowers, and pour upon them boiling hogs lard; let them stand close covered, in a bath heat for eight, or ten hours, and then strain off.

52. *A Blistering Ointment.*

Take an ounce of cantharides bruised, boil in half a pint of water to four ounces, then add four ounces of yellow basilicon, and boil to the consumption of half; to dress continual blisters. It gives little or no pain.

53. *A Discutient Collyrium.*

Take of the common emulsion, and camphor julep, equal parts; or to half a pint of the latter, add four ounces of rose water, and two of mindererus spirit.

54. *An Anodine Discutient Plaster.*

Take two ounces of cumin plaster; three drams of camphor, rubbed with a little oil, and a dram and a half of opium.

55. *A Styptic Tincture.*

Infuse three ounces of powdered galls, in a quart of rectified spirit of wine, and let them be kept in a sand heat three days.

56. *Sir HANS SLOANE'S Liniment.*

Take of prepared tutty, one ounce; of lapis hamatites prepared, two scruples; of the best aloes prepared, twelve grains; of prepared pearl, four grains. Put them into a porphyry, or marble mortar, and rub them with a pestle of the same stone, very carefully, with a sufficient quantity of vipers grease, or fat, to make a liniment; to be applied with a fine pencil, morning, or evening, or both, according to the conveniency of the patient.





## AN APPENDIX

### TO THE

#### CHAPTERS on *Fractures, and Dislocations.*

**A**S the above compendium was workt off, before Mr. *Pott's* remarks on fractures, and dislocations were published, we were desirous of availing ourselves of that very ingenious and sensible performance ; and have accordingly here added what we thought necessary, to supply our deficiencies on these heads ; which, indeed, are principally collected from the opinions, and practice of that Gentleman.

It has already been observed, that fractured bones, are of themselves, abstractedly considered, inactive bodies ; and that their displacement, is owing to the contractions of particular muscles, which are attached to them.

The tension, and inflammation, attending broken bones, is frequently thought to be an obstacle to the immediate reduction, 'till these symptoms are removed by poultices, fomentations, &c. which sometimes require a considerable time to effect : but this period may be considerably shortened, by relaxing the injured muscles ; and instead of keeping the limb extended, placing it in a flexed state : for a strait position

position of the thigh, or leg, is a degree of extension, which the muscles in their present state, can ill bear, and will retard their recovery: this change of position will be attended also with another circumstance of very great consequence; which is, that the bones may in such posture be immediately set; and not one moments time be thereby lost, by continuing them in an uneven irregular state. Indeed, violent extensions, to reduce fractured bones, can scarce ever be wanted, if the position of the limb be duly attended to, by relaxing the muscles previous to the reduction: for great mischief has often ensued an undue exertion of force, by lacerating the muscles, and producing spasms, and inflammation, in consequence thereof: this certainly is a point of great importance, and should be particularly attended to; and if position will facilitate the coaptation of bones, without the exertion of force on the inflamed, and bruised muscles, it ought ever to be put in practice, and should be considered as an improvement in surgery of the utmost consequence.

If in the fracture of the os humeri, we always keep the elbow bent to relax the surrounding muscles, why, on the same parity of reasoning should not the knee be bent in a fracture of the os femoris? the same reasoning will hold good in fractures of both bones of the leg, as a moderate flexure of the knee will relax the muscles, and take off their propensity to action.

A fracture

A fracture of the fibula attended with a dislocation of the tibia, more particularly requires this relaxed state, by laying it on its outside, with the knee moderately bent; in order to relax the gastrocnemii, and those muscles which pass behind the fibula, and under the os calcis: this position also favours the reduction, which is otherwise obtained with difficulty.

The laying the thigh, and leg sideways in fractures of the leg, and thigh, has also many advantages attending it, besides the ease to the patient by flexing the knee: this posture is more comfortable and convenient on many accounts, as well as removing the foot and toes out of the way of being hurt by the weight of the bed cloths, and making a fracture box, and cradle unnecessary.

Mr. *William Sharp's* account of the splints invented by him for fractured legs, is well worth consulting; as they are simple, and ingeniously contrived; calculated for the safe, and easy conveyance of patients at any distance from home; answer every intention of splints afterwards; and are very useful for the safe removal of the patient frequently out of bed.

In the treatment of compound fractures, after evacuations have been properly pursued, to abate fever, tension, and inflammation; and after a good suppuration has been established by means of emollient cataplasms, these latter  
may



may be omitted; and the refection, and support of the patient should be attended to, that he sinks not under the discharge: the external applications may now be of the spirituous, and corroborant kind; and the internals be the Peruvian bark, the best strengthner, and resister of putrefaction we are acquainted with.

No particular rules can be laid down, as the nature, and circumstances of each individual case must determine the surgeon's conduct. The sanguine, and bilious must be lowered, and emptied; the languid, and weak must be assisted by medicines that will add force to the vis vitæ; pain and irritation will demand anodines; and the bark with nitre, or cordials; as the pulse, and other circumstances indicate, must be given to remove fever, and prevent the putrefaction of the blood and juices.

When a gangrene is impending, and the parts are in the highest state of inflammation, superficial scarifications do more harm than good; but when the mortification is advanced, deep incisions through the membrana adiposa, are necessary to discharge the sanies, and imprisoned air, arising from the putrefaction confined under it: the best dressing perhaps is the digestive with turpentine, and the beer poultice with Ther. Lond. instead of hot spirituous tinctures, and ægyptiacum; which heat, stimulate, and harden, instead of relaxing the

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indurated

indurated vessels; while the others procure a kind suppuration, the only means of obtaining a separation of the diseased parts from the sound.



### DISLOCATIONS.

**I**N dislocations, as in fractures, our great attention should be paid to the muscles belonging to the part affected: the mere bones composing the articulation, or the mere connecting ligaments, would in general afford very little opposition, was it not for the resistance of the muscles, and tendons attached to, and connected with them: for by examining the fresh joints of the human body, we shall find that they not only are all moved by muscles and tendons, but also, that though what are called ligaments of the joints do really connect, and hold them together, yet in many instances they are, when stript of all connection, so very weak, and lax, and so dilatable and distractile, that they do little more than connect the bones, and retain the synovia.

All the force made use of in a dislocated bone, should be applied to that bone only, and not to the next; so that neither the fore-arm, or leg should be extended, in order to reduce the humerus, or femur.

In

In the reduction of the humerus luxated forward, so that the head lies under the great pectoral muscle, the carrying the extended arm backwards, so as to put that muscle on the stretch, renders the reduction very difficult; but the bringing the arm forward, so as to relax the said muscle, renders the reduction easy.

In the reduction of a dislocated hip, the sheet, or bandage should be fixed in the groin of the opposite side to the luxation.

The reduction of a luxated elbow, should always be attempted by bending the said joint.

When the inner ancle is dislocated in consequence of a fracture of the fibula, the leg should not be extended, but bent, to accomplish the reduction easier.

In the reduction of the thigh bone, a strait position of the leg, and thigh, will increase the difficulty; so that the knee should always be flexed, to relax the muscles, and render them less capable of resistance.

Whatever degree of force may be found necessary for the reduction of a luxated joint, such force should be gradually employed: for an extension thus increased, may be carried to a great degree, without any injury to the parts extended; whereas, great force, exerted



hastily, is often productive of very terrible, and lasting mischief.

For more particular information, we refer the reader to the treatise itself, where he will find this important innovation in practice, supported with great ingenuity, and force of reasoning.




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E R R A T A.

**P**A G. 23, l. 16. after urine, *add* and sweats P. 54, l. 17, *read* is for are. P. 57, l. 7, *read* the for this. P. 83, l. 3. after barley, *add* water. *Ditto*, l. 6, after distinct, *add* coherent. P. 108, l. last, for greatest, *read* greater. P. 118, l. 20, for drive, *read* derive. P. 155, l. 10, for defluxions, *read* difluxion. P. 179, l. 13, after be, *add* attended. P. 245, l. 13, del. a. P. 278, l. 9. after parts, *add* not. P. 261, l. 15, for to *read* of. P. 283, l. 2, after care, *add* therefore. P. 305, l. 1, *read* or for a. P. 31, l. 1, for and *read* when. P. 314, l. 15, for plaister, *read* leather. P. 356, l. 7, for which *read* while. P. 381, l. 15, del. l in acescent,